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SECTION 01025

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SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 LUMP SUM PAYMENT ITEMS

1.1.1 General

Payment items for the work of this contract for which contract lump sum payments will be made are listed in the BIDDING SCHEDULE and described below. All costs for items of work, which are not specifically mentioned to be included in a particular lump sum or unit price payment item, shall be included in the listed lump sum item most closely associated with the work involved. The lump sum price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for which separate payment is not otherwise provided.

1.1.2 Lump Sum Items

- a. "Mobilization and Demobilization" [Item No's. 0001]
 - (1) Description: This item shall include all work as specified in SECTION 02482 DREDGING. Reference is made to Clause entitled "MOBILIZATION AND DEMOBILIZATION", for items that shall be included in the cost for mobilization and demobilization.
 - (2) Unit of Measure: lump sum

1.2 UNIT PRICE PAYMENT ITEMS

1.2.1 General

Payment items for the work of this contract on which the contractunit price payments will be made are listed in the BIDDING SCHEDULE and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

1.2.2 Unit Price Items

- a. "Dredging" [Itm No's. 0002]
 - (1) Description: This item shall included all work as specified in SECTION 02482 DREDGING except for work related to mobilization and demobilization. The contract unit price per cubic yards for dredging shall included the cost for removal, conveyance and disposal of all materials as shown on the drawings and as specified herein, except original materials, ledge rock, boulders, cobbles, rock fragments, wrecks, scrap materials, snags, stumps, piles, debris or other material which cannot be removed or buried below the required depth by the plant specified in the accepted

bid, or the equivalent of such plant, with out blasting or special apparatus. The unit price shall also include the cost of all work required to be performed for the use of the disposal area. Nothing in this paragraph shall be construed as prohibiting the removal of excepted material by special means at prices agreed and approved in accordance with applicable provisions of the contract.

- (2) Unit of measure: Payment for all acceptably completed work required under this Section of the specification will be made at the applicable contract unit price per cubic yard for the payment item "Dredging": "First 64,000 Cubic Yards" and "Over 64,000 Cubic Yards".
- PART 2 PRODUCTS (Not Applicable)
- PART 3 EXECUTION (Not Applicable)
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SECTION 01100 SPECIAL PROJECT PROCEDURES

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred within the text by the basic designation only.

U.S. GOVERNMENT CODE OF FEDERAL REGULATIONS (CFR)

33 CFR 320-330 General Regulatory Policies, Permits,

Enforcement and Definitions

40 CFR 233 State Program Regulations

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with SECTION 01330, entitled "SUBMITTAL PROCEDURES":

SD-01 Data

Accident Prevention Plan; G-AOF

Contractor shall provide an accident prevention plan including an activity hazard analysis to the Contracting Officer within 15 calendar days after receipt of award.

Payrolls and Basic Records; G-AOF

Contractor shall submit payrolls and basic records in accordance with the CLAUSE entitled "PAYROLLS AND BASIC RECORDS".

SD-07 Schedules

Progress Chart; G-AOF

Contractor shall submit progress chart in accordance with the Clause entitled "SCHEDULE FOR CONSTRUCTION CONTRACTS".

Utility Location Plan

Submit a plan of the proposed procedure for locating existing utilities prior to commencing work at the project site. Also submit a copy of the utility location findings prior to commencing work on the site.

Traffic Control Plan

At least fifteen (15) calendar days prior to commencing work at the site, submit a detailed, site specific plan for the control of traffic on the public roadways adjacent to the work area. Coordination of construction traffic with public use of the roadways shall be fully described, including

all safety related characteristics.

Survey Note Format

Submit the proposed survey note format prior to performing any survey work at the work site.

SD-18 Records

Notice to Mariners

A copy of the completed "NOTICE TO MARINERS" form shall be provided prior to the commencement of work.

Buoy Relocation Position

Immediately upon relocating any U.S. Coast Guard buoys the Contractor shall report their position by latitude and longitude in writing.

Survey Information

Upon completion of the contract work, the originals of all field notes, sketches, recordings and computations made by the Contractor in performing the layout work shall be submitted in ring binders.

1.3 REGULATORY REQUIREMENTS

1.3.1 Additional Work Proposed and Not Authorized

1.3.1.1 Work Subject to 33 CFR, Parts 320-330

Any additional work (not specifically shown on the plans or delineated in the specifications) proposed by the Contractor in or affecting navigable waters, including wetlands (as defined in 33 CFR, Parts 320-330, published in the Federal Register Vol.51, No. 219, Thursday, November 13, 1986) shall not be performed without a Department of the Army Permit. This requirement shall be applicable to all work, permanent or temporary, and/or fill(s). The Department of the Army Permit shall be approved by the District Engineer or Deputy District Engineer in accordance with the laws of the United States and the regulations promulgated thereunder, including, but not limited to, the River and Harbor Act of 1899, the Clean Water Act and the National Environmental Policy Act of 1969, as amended. Corps employees (Contracting Officer's Representatives (COR) or inspectors) are not delegated authority to authorize such work. Information on making application for such permit(s) may be obtained by contacting one of the offices as listed hereinafter. When applying for information or a permit, a copy of any correspondence should be directed to the Contracting Officer of this contract. If a permit is not obtained, the additional work cannot be accomplished. Any delay in processing the permit will not constitute the basis of a claim under this contract. The fact that the Contractor is performing work under a Department of the Army Contract will give the Contractor no greater rights than any other applicant for a Department of the Army Permit.

MICHIGAN-INDIANA

Regulatory Branch Engineering & Technical Services U.S. Army Engineer District, Detroit P. O. Box 1027 Detroit, MI 48231 Telephone: 313-226-6813

1.3.1.2 Work Subject to 40 CFR, Part 233

Any additional work (not specifically shown on the plans or included in the specifications), proposed by the Contractor, in or affecting waters of the United States, including wetlands, in the State of Michigan (as defined in 40 CFR, Part 233, published in the Federal Register, Vol. 49 No. 192, Tuesday October 2, 1984) shall not be performed without a State of Michigan regulatory permit. Information on making an application for such permit may be obtained by contacting the office listed hereinafter. When applying for a permit or for information, a copy of any correspondence shall be furnished to the Contracting Officer. If a permit is not obtained, the additional work shall not be performed. Any delay in obtaining or processing the permit will not constitute a basis for a claim under this contract.

STATE OF MICHIGAN

Department of Environmental Quality Land & Water Management Division P.O. Box 30458 Stevens T. Mason Building Lansing, MI 48909 Telephone: 517-373-4608

1.4 PROJECT/SITE CONDITIONS

1.4.1 Condition and Use of Project Site

The drawings indicate soundings and elevations at the dredging and disposal sites as found in condition surveys made as stated on the contract drawings. A notification of at least five (5) calendar days shall be given to the Contracting Officer prior to bringing any construction equipment or material upon the work site. The Contractor shall be responsible for damages that may be suffered due to its operations. The Contractor shall note CLAUSE title "PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS."

1.4.1.1 Physical Conditions

The physical conditions shown on the drawings are indicative of those that prevailed at the time of the site investigations and may be different than those at the time of construction. Significant variations that would require changes to the plans or specification shall be reported to the Contracting Officer immediately.

1.4.2 Waterways Navigation and Traffic

The Contractor shall acquaint itself with all information and regulations pertaining to navigation and vessel traffic within the waterways at the project site. The Contractor shall coordinate with the U.S. Coast Guard to assure that a "NOTICE TO MARINERS" is issued prior to its work activity at the project site. A copy of the requisite notice form is enclosed in SECTION 01999. The completed form shall be sent to the address stated in the Subparagraph entitled "Temporary Lights, Signals and Buoys Required by U.S. Coast Guard". The Government will not undertake to keep the waterways

free from vessels or other obstructions, except to the extent of such regulations, if any, as may be prescribed by the Secretary of the Army, in accordance with the provisions of Section 7 of the River and Harbor Act approved 8 August 1917 (see Title 33, U.S.C.A. Sec. 1). The Contractor is required to conduct its work in such manner as to obstruct navigation as little as possible and, in case the Contractor's plant so obstructs a channel as to make difficult or endanger the passage of vessels, said plant shall be promptly moved on the approach of any vessel to such an extent as may be necessary to afford a practicable passage. Upon completion of the work, the Contractor shall promptly remove its plant, including ranges, buoys, piles, and other marks placed by it under the contract in navigable waters or on shore.

1.4.2.1 Navigation

Information and regulations pertaining to navigation may be obtained from the current issue of the "UNITED STATES COAST PILOT 6," issued annually by the Department of Commerce, National Oceanic and Atmospheric Administration (NOAA). The "UNITED STATES COAST PILOT" may be obtained from National Ocean Survey, NOAA, Distribution Division-C44, Riverdale, Maryland 20840.

1.4.2.2 Traffic

Vessels that may use the waterways at the project site consist of recreational craft and commercial vessels. This traffic may interfere with contract operations and the Contractor shall conduct its work with due regard to and in coordination with the requirements of all navigation. Information regarding the types and amount of passages made by commercial vessels that may use the waterways at the project site may be obtained from the current issue of the "Waterborne Commerce of the United States, Part 3, Waterways and Harbors, Great Lakes," published by the Department of Army, Corps of Engineers. The Department of the Army publication may be obtained at no charge from the following:

District Engineer, U.S. Army Engineer District, New Orleans, Waterborne Commerce Section, P.O. Box 60267, New Orleans, Louisiana 70160. Phone 504-862-1425, FAX 504-862-1091.

1.4.3 Existing Vegetation, Structures, Equipment, Utilities & Improvements

General locations of applicable existing utilities, vegetation, structures, equipment and improvements, based upon latest information available to the Government have been shown on the drawings. However, it is the Contractor's obligation to establish the exact horizontal and vertical location and size of all existing utility lines which are located within the required work area. The Contractor shall submit a plan for locating existing utilities and a copy of its findings prior to commencing work on the site. Any utility lines which are not found by the Contractor, but which are known to exist at the project site, shall be reported to the Contracting Officer immediately. The Contracting Officer will have the option of directing commencement of work at the site or requiring the Contractor to submit further plans for locating the utility lines. Once the utilities have been located and marked, the Contractor shall be deemed to have the location made known to it pursuant to CLAUSE titled "PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS." The Contractor is required under CLAUSE titled "PERMITS AND RESPONSIBILITIES" to comply with, but not limited to, the Michigan Protection of Facilities During Construction Activities Act. If the Contractor damages any existing utility line, vegetation, structure,

equipment or improvement, a report thereof shall be made immediately to the Contracting Officer. In any event, existing utility lines, vegetation, structures, equipment or improvements shall be protected from damage, and if damaged, shall be repaired by the Contractor at its own expense.

1.4.4 Identification of Employees

The Contractor shall be responsible for requiring each employee engaged on the work to wear a hardhat of a distinctive color to identify that the person is an employee of the Contractor or display such identification as may be approved.

1.4.5 Vehicular Access

Throughout the period of work on this contract, the Contractor shall maintain an all-weather roadway through or around its work area when work therein would otherwise block an existing roadway. Such permanent or temporary roadways shall be kept open for use by emergency vehicles, as well as residential and commercial traffic at all times.

1.4.6 Contractor-Furnished Utility Services

The Contractor shall furnish, at its own expense, all water, electric current and other utilities required for its use.

1.4.7 Traffic Control Plan

The Contractor shall control traffic in accordance with its approved plan.

1.4.8 Temporary Lights, Signals and Buoys Required by Coast Guard

All temporary lights, signals and buoys required by the U.S. Coast Guard must be displayed during the required work. Information regarding required signals, lights, buoys and other requirements may be obtained from the Commander (OAN), U.S. Coast Guard, ATTENTION: Aids to Navigation Branch, 1240 East Ninth Street, Cleveland, Ohio 44199-2060, Telephone (216) 902-6074.

1.4.9 Navigation Buoys

1.4.9.1 Relocation of Existing Buoys

If the relocation of existing navigation buoys is required to perform the contract work, the Contractor shall request permission for their relocation from the U.S. Coast Guard through the Contracting Officer. The request shall be provided to the Contracting Officer not less than three (3) weeks prior to need of the buoy relocation. The Contractor shall be responsible for performing the relocation work, which shall be in accordance with U.S. Coast Guard requirements.

1.4.9.2 Temporary Dredging and Construction Buoys

In order to distinguish temporary buoys placed and maintained by the Contractor for dredging or construction purposes from aids to navigation placed by the U.S. Coast Guard, the Contractor's buoys shall be white and the top two (2) feet shall be light green in color. The Contractor shall remove its temporary buoys at the completion of the work.

1.4.9.3 Buoy Markings

If buoys with special markings are needed to indicate the different sides of the navigable channel, prior arrangements shall be made with the U.S. Coast Guard, through the Contracting Officer.

1.4.10 Layout of Work and Surveys

1.4.10.1 Layout of Work

The following requirements are in addition to the requirements of CLAUSE titled "LAYOUT OF WORK." The Government has established bench marks and horizontal control points at the site of the work. Horizontal control points and descriptions of bench marks are shown on the drawings and on sheets enclosed in SECTION 01999. The elevations of bench marks are referred to mean water level (IGLD 1955), at Father Point, Quebec, Canada.

1.4.10.2 Surveyor Requirements

From these control points and bench marks, the Contractor shall lay out the work by establishing all lines, grades, range markers and gauges at the site as necessary to control the work. All survey data shall be recorded in accordance with standard and approved methods and in the format approved by the Contracting Officer. All field notes, sketches, recordings and computations made by the Contractor in performing the layout work shall be available at all times during the progress of the work for ready examination by the Contracting Officer or his or her duly authorized representative and upon completion of the contract work the originals shall be turned over to the Contracting Officer in ring binders.

1.4.10.3 Suspension

The Contracting Officer may require that work be suspended at any time when location and limit marks established by the Contractor are not reasonably adequate to permit checking the work. Such suspension will be withdrawn upon satisfactory replacement of location and limit marks. Such suspension shall be at no additional cost to the Government and shall not entitle the Contractor to an extension of time for completing the work.

1.4.10.4 Verification

The Government may make checks as the work progresses to verify lines and grades established by the Contractor and to determine the conformance of the completed work as it progresses with the requirements of contract specifications and drawings. Such checking by the Contracting Officer or his or her representative shall not relieve the Contractor of its responsibility to perform all work in accordance with the contract drawings and specifications and the lines and grades given therein.

1.5 SEQUENCING AND SCHEDULING

1.5.1 Exclusion of Period in Computing Completion Schedules

No work will be required during the period between 1 December and 15 April inclusive and the days in this period will not be counted when computing the required completion date. The Contractor may perform work, unless otherwise prohibited, during all or any part of this period upon giving prior written notice to the Contracting Officer.

1.5.2 Sunday, Holiday And Night Operations

When the Contractor elects to work on Sundays, holidays or nights (when not prohibited herein), notice of its intention to do so shall be given to the Contracting Officer not less than forty-eight (48) hours in advance thereof. Adequate lighting for thorough inspection of night operations shall be provided by the Contractor at its expense.

1.5.3 Start Work

Evidence that the Contractor has started mobilization, preparing submittal register and other preparatory work will satisfy the requirement that work commence within ten (10) calendar days after receipt of Notice to Proceed. (See Clause titled COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK.)

1.6 ON-BOARD ACCOMMODATIONS FOR INSPECTORS

The Contractor shall furnish regularly to the Government's inspectors on board the dredge or other craft performing the work a chair and a suitable separate lockable desk for office purposes. The desk shall be in a room fully equipped and maintained to the satisfaction of the Contracting officer. The room shall be maintained at a comfortable temperature, ventilated and lighted. Washing and toilet facilities shall be made available for the inspectors. If the Contractor fails to meet these requirements, the facilities referred to above will be secured by the Contracting Officer, and the cost thereof will be deducted from payments to the Contractor.

- PART 2 PRODUCTS (NOT APPLICABLE)
- PART 3 EXECUTION (NOT APPLICABLE)

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SECTION 01101

REAL ESTATE

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SECTION 01101

REAL ESTATE

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with SECTION 01330, entitled "SUBMITTAL PROCEDURES":

SD-18 Records

Additional Property Agreements; G-RED

Copies of any agreements for Contractor-acquired real estate rights shall be furnished before entering thereon.

1.1.1 REGULATORY REQUIREMENTS

1.1.2 Real Estate Rights

Rights for the use of the Government-furnished transfer and disposal areas have been obtained and the general limits of the areas are shown on the drawings. Copies of instruments conveying rights for use of the disposal and transfer areas shown on the drawings and specified herein are available for inspection in the Engineering & Technicial Services, Design Branch, U.S. Army Corps of Engineers, Detroit District, 477 Michigan Avenue, McNamara Building, Detroit, Michigan. Conformance to all applicable requirements of the instruments conveying rights is required. Two (2) copies of each instrument will be furnished to the Contractor.

1.1.3 Additional Real Estate Rights

Any additional real estate rights desired by the Contractor shall be obtained by the Contractor at its own expense. Such agreements shall clearly relieve the Government of any responsibility for damages or liability resulting from the Contractor's use of such grounds.

1.2 PROJECT/SITE CONDITIONS

1.2.1 Location and Verification

It shall be the Contractor's responsibility to accurately locate the limits of all lands utilized under the contract. The corner and angle points of each area for which rights have been obtained shall be marked with semipermanent markers except where there is an approved existing property marker. Temporary markers shall be placed at points on alignment. The points on alignment shall be marked at stations so that intervals between points do not exceed 200 feet.

1.2.2 Survey Markers

All markers shall be installed in an area prior to its use and they shall

be available for reference during and upon completion of use of the area. Where approved existing property markers are found, a witness stake, as specified in Subparagraph, "Semipermanent Markers" below, shall be provided. If the types of markers specified hereinafter cannot be used, other types, as approved by the Contracting Officer, shall be provided.

1.2.2.1 Semipermanent Markers

The markers shall be a steel rod one-half inch in diameter and four (4) feet long. The steel rod shall be driven vertically into the ground so that the top is flush with the finished ground surface. Each marker shall be witnessed by a 2" x 2" yellow stake extending two (2) feet above the ground surface and driven into the ground until stable, with not less than one (1) foot penetration.

1.2.2.2 Temporary Markers

Markers shall be 2" \times 2", red-colored, wood hub stakes driven into the ground until stable (not less than one (1) foot penetration) with two (2) feet projecting above the ground surface. If the period in which temporary markers are to be in place exceeds one (1) construction season, a more permanent type of marker, as approved, shall be provided.

- PART 2 PRODUCTS (NOT APPLICABLE)
- PART 3 EXECUTION (NOT APPLICABLE)
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SECTION 01130

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SECTION 01130

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

40 CFR 261

Identification and listing of Hazardous Waste

ENGINEERING MANUALS (EM)

EM 385-1-1

(1992) U.S. Army Corps of Engineers Safety and Health Requirements Manual

MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT)

MDOT 1996

(1996) Standard Specifications for Construction

1.2 DEFINITIONS

Environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents that adversely affect human health or welfare; unfavorably alter ecological balances of plant or animal communities; or degrade the environment from an aesthetic, cultural or historic perspective. Environmental protection is the prevention/control of pollution and habitat disruption that may occur during construction. The control of environmental pollution and damage requires consideration of air, water, land, biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive materials; and other pollutants.

1.3 SUBMITTALS

Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 entitled "SUBMITTAL PROCEDURES":

SD-01 Data

Environmental Protection Plan; G-AOF

Submit in writing an Environmental Protection Plan within ten (10) calendar days after receipt of the Notice To Proceed. See Article titled ENVIRONMENTAL PROTECTION PLAN for details. Information on existing environmental documents pertaining to the project may be obtained by

contacting the Environmental Analysis Branch, Detroit District, U.S. Army Corps of Engineers, 477 Michigan Avenue, Detroit, MI. 48226.

1.4 ENVIRONMENTAL PROTECTION REQUIREMENTS

The Contractor shall comply with all applicable Federal, State, and local laws and regulations. The Contractor shall provide environmental protective measures and procedures to prevent and control pollution, limit habitat disruption, and correct environmental damage that occurs during construction.

1.4.1 Protection of Features

This section supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. The Contractor shall prepare a list of features requiring protection under the provisions of the contract clause which are not specially identified on the drawings as environmental features requiring protection. The Contractor shall protect those environmental features, indicated specially on the drawings, in spite of interference which their preservation may cause to the Contractor s work under the contract.

1.4.2 Environmental Assessment of Contract Deviations

The Contract specifications have been prepared to comply with the special conditions and mitigation measures of an environmental nature which were established during the planning and development of this project. The Contractor is advised that deviations from the drawings or specifications (e.g., proposed alternate borrow areas, disposal areas, staging areas, alternate access routes, etc.) could result in the requirement for the Government to reanalyze the project from an environmental standpoint. Deviations from the construction methods and procedures indicated by the plans and specifications which may have an environmental impact will require a extended review, processing, and approval time by the Government. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

1.5 ENVIRONMENTAL PROTECTION PLAN

The Contractor shall submit an Environmental Protection Plan for review and acceptance by the Contracting Officer. The Government will consider an interim plan for the first 30 days of operations. However, the Contractor shall furnish an acceptable final plan not later than 30 calendar days after receipt of the Notice to Proceed. Acceptance is conditional and is predicated upon satisfactory performance during construction. The Government reserves the right to require the Contractor to make changes in the Environmental Protection Plan or operations if the Contracting Officer determines that environmental protection requirements are not being met. The plan shall detail the actions which the Contractor shall take to comply with all applicable Federal, State, and local laws and regulations concerning environmental protection and pollution control and abatement, as well as the additional specific requirements of this contract. No physical work at the site shall begin prior to acceptance of the Contractor s plan or an interim plan covering the work to be performed. The environmental protection plan shall include, but not be limited to, the following:

1.5.1 Federal, State and Local Laws and Regulations

The Contractor shall be knowledgeable of all Federal, State and local environmental laws and regulations which apply to the construction operations under the Contract and shall list any unique requirements applicable to this contract as part of the Environmental Protection Plan.

1.5.2 Spill Control Plan

The Contractor shall include as part of the environmental protection plan, a Spill Control Plan. The plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by the Emergency Response and Community Right-to-Know Act or regulated under State or local laws or regulations. The Spill Control Plan supplements the requirements of EM 385-1-1. This plan shall include as a minimum:

- a. The name of the individual who will be responsible for implementing and supervising the containment and cleanup.
- b. Training requirements for Contractor's personnel and methods of accomplishing the training.
- c. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.
- d. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.
- e. The methods and procedures to be used for expeditions contaminant cleanup.
- f. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity spill occurs. The plan shall contain a list of the required reporting channels and telephone numbers.

1.5.3 Recycling and Waste Minimization Plan

The Contractor shall submit a Recycling and Waste Minimization Plan as a part of the Environmental Protection Plan. The plan shall detail the Contractor's actions to comply with the following recycling and waste minimization requirements:

a. The Contractor shall participate in State and local government sponsored recycling programs to reduce the volume of solid waste materials at the source.

1.5.4 Contaminant Prevention Plan

As a part of the Environmental Protection Plan, the Contractor shall prepare a contaminant prevention statement identifying potentially hazardous substances to be used on the job site and intended actions to prevent accidental or intentional introduction of such materials into the

air, water, or ground. The Contractor shall detail provisions to be taken to meet Federal, State, and local laws and regulations regarding the storage and handling of these materials.

1.5.5 Environmental Monitoring

The Contractor shall include in the plan the details of environmental monitoring requirements under the laws and regulations and a description of how this monitoring will be accomplished.

- PART 2 PRODUCTS (Not Applicable)
- PART 3 EXECUTION
- 3.1 SPECIAL ENVIRONMENTAL PROTECTION REQUIREMENTS
- 3.1.1 Tree Protection

No ropes, cables, or guys shall be fastened to or attached to any tree(s) for anchorage unless specifically authorized by the Contracting Officer.

3.1.2 U.S. Department of Agriculture (USDA) Quarantined Considerations

The Contractor shall thoroughly clean all construction equipment at the prior job site in a manner that ensures all residual soil is removed and that egg deposits from plant pests are not present. The Contractor shall consult with the USDA Plant Protection and Quarantine (USDA - PPQ) jurisdictional office for additional cleaning requirements that may be necessary.

3.1.3 Non-Indigenous Aquatic Nuisance Species

The Contractor shall conduct diligent watercraft operating practices to prevent the spread of Non-Indigenous Aquatic Nuisance Species (ANS). Such practices shall include, but not be limited to, cleaning equipment on-site to prevent the spread of seeds, eggs, larvae, or other dispersal vectors (e.g. do not transport soil and plant matter from one location to another); and discharging or exchanging ballast water or other water from a vessel of any type only at a location where the chances for survival of ANS are minimal, such as at cold, deep regions of Great Lakes which are far from shore..

3.1.4 Soil Disposal Areas on Government Property

Material disposal on Government property shall be disposed only in those areas designated on the contract drawings. Hazardous, toxic, and radiological wastes (HTRW) shall not be disposed of on Government property. Disposal operations shall be managed and controlled to prevent erosion of soil or sediment from entering nearby waters or wetlands. Disposal operations shall be developed and managed in accordance with the grading plan shown on the drawings or as approved by the Contracting Officer.

3.1.5 Disposal of Solid Wastes

Solid waste is rubbish, debris, waste materials, garbage, and other discarded solid materials (excluding clearing debris and hazardous waste as defined in following paragraphs). Solid waste shall be placed in containers and disposed on a regular schedule. All handling and disposal shall be conducted in such a way as to prevent spillage and contamination.

3.1.6 Disposal of Contractor Generated Hazardous Wastes

Hazardous wastes are hazardous substances as defined in 40 CFR 261, or as defined by applicable State and local regulations. Hazardous waste generated by construction activities shall be removed from the work area and be disposed in compliance with Federal, State, and local requirements. The Contractor shall segregate hazardous waste from other materials and wastes, and shall protect it from the weather by placing it in a safe covered location; precautionary measures against accidental spillage such as berming or other appropriate measures shall be taken. Hazardous waste shall be removed from Government property within 60 days. Hazardous waste shall not be dumped onto the ground, into storm sewers or open water courses, or into the sanitary sewer system.

3.1.7 Fuels and Lubricants

Fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spills and evaporation. Lubricants and waste oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with Federal, State, and local laws and regulations.

- 3.2 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES
- 3.2.1 Discovered Historic, Archaeological, and Cultural Resources

If during construction activities, items are observed that may have historic or archaeological value (e.g.,human remains or artifacts are discovered), such observations shall be reported immediately to the Contracting Officer so that the District Archaeologist may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources. The Contractor shall prevent its employees from trespassing on, removing, or otherwise disturbing such resources.

3.3 PROTECTION OF WATER RESOURCES

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters.

3.4 PROTECTION OF FISH AND WILDLIFE RESOURCES

The Contractor shall keep construction activities under surveillance, management and control to minimize interference with, disturbance to and damage of fish, wildlife and flora. Species that required specific attention along with measures for their protection shall be listed by the Contractor prior to beginning of construction operations. See Subparagraph, "Environmental Protection Plan."

3.4.1 State of Michigan - Allowed and Prohibited Dredging

During the following periods of the year dredging is allowed:

Harbor Allowed Periods:

Monroe Harbor 15 June through 31 March

Dredging is prohibited during any other periods.

3.5 PROTECTION OF AIR RESOURCES

Special management techniques as set out below shall be implemented to control air pollution by the construction activities. These techniques supplement the requirements of Federal, State, and local laws and regulations; and the safety requirements under this Contract. If any of the following techniques conflict with the requirements of Federal, State, or local laws or regulations, or safety requirements under this contract, then those requirements shall be followed in lieu of the following.

3.5.1 Particulates

Airborne particulates, including dust particles, from construction activities and processing and preparation of materials shall be controlled at all times, including weekends, holidays, and hours when work is not in progress. The Contractor shall maintain all excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, disposal sites, borrow areas, and all other work areas free from airborne dust which would cause a hazard or nuisance.

3.6 INSPECTION

If the Contracting Officer notifies the Contractor in writing of any observed noncompliance with contract requirements or Federal, State, or local laws, regulations, or permits, the Contractor shall inform the Contracting Officer of proposed corrective action and take such action to correct the noncompliance. If the Contractor fails to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action is taken. No time extensions will be granted or costs or damages allowed to the Contractor for any such suspension.

3.7 MAINTENANCE OF POLLUTION CONTROL FACILITIES

The Contractor shall maintain all constructed pollution control facilities and portable pollution control devices for the duration of the Contract or for the length of time construction activities create the particular pollutant.

3.8 TRAINING OF CONTRACTOR PERSONNEL

Contractor personnel shall be trained in environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel monthly. The training and meeting agenda shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, installation and care of facilities (vegetative covers, etc.), and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control. Anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants, shall also be discussed. Other items to be discussed shall include recognition and protection of Archaeological sites and artifacts.

3.9 POST CONSTRUCTION CLEANUP OR OBLITERATION

The Contractor shall obliterate all signs of temporary facilities such as haul roads, work area, structures, stock piles of excess or waste materials, fencing, buoys, stakes, or other vestiges of construction within the work, storage and access areas or as directed by the Contracting Officer. Except for surfaced areas, the areas shall be restored to near natural conditions which permit the growth of vegetation thereon. In areas where restoration to near natural conditions is not required, surfaces shall be evenly and smoothly dressed, sloped to drain, and the edges of the restored area graded to be flush with the surrounding existing grade even if original contours are not restored. All damaged non-surfaced areas shall be restored by topsoiling, fertilizing, seeding and mulching, unless otherwise specified or directed. The topsoiling, fertilizing, seeding, and mulching shall be in accordance with the applicable provisions of MDOT 1996, DIVISION 8, Section 816 "Turf Establishment".

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SECTION 01312A

QUALITY CONTROL SYSTEM (QCS)

1.1 GENERAL

The Government will use the Resident Management System for Windows (RMS) to assist in its monitoring and administration of this contract. The Contractor shall use the Government-furnished Construction Contractor Module of RMS, referred to as QCS, to record, maintain, and submit various information throughout the contract period. This joint Government-Contractor use of RMS and QCS will facilitate electronic exchange of information and overall management of the contract. QCS provides the means for the Contractor to input, track, and electronically share information with the Government in the following areas:

Administration Finances Quality Control Submittal Monitoring Scheduling Import/Export of Data

1.1.1 Correspondence and Electronic Communications

For ease and speed of communications, both Government and Contractor will, to the maximum extent feasible, exchange correspondence and other documents in electronic format. Correspondence, pay requests and other documents comprising the official contract record shall also be provided in paper format, with signatures and dates where necessary. Paper documents will govern, in the event of discrepancy with the electronic version.

1.1.2 Other Factors

Particular attention is directed to Contract Clause, "Schedules for Construction Contracts", Contract Clause, "Payments", Section 01320A, PROJECT SCHEDULE, Section 01330, SUBMITTAL PROCEDURES, and Section 01451A, CONTRACTOR QUALITY CONTROL, which have a direct relationship to the reporting to be accomplished through QCS. Also, there is no separate payment for establishing and maintaining the QCS database; all costs associated therewith shall be included in the contract pricing for the work.

1.2 QCS SOFTWARE

QCS is a Windows-based program that can be run on a stand-alone personal computer or on a network. The Government will make available the QCS software to the Contractor after award of the construction contract. Prior to the Pre-Construction Conference, the Contractor shall be responsible to download, install and use the latest version of the QCS software from the Government's RMS Internet Website. Upon specific justification and request by the Contractor, the Government can provide QCS on 3-1/2 inch high-density diskettes or CD-ROM. Any program updates of QCS will be made available to the Contractor via the Government RMS Website as they become available.

1.3 SYSTEM REQUIREMENTS

The following listed hardware and software is the minimum system configuration that the Contractor shall have to run QCS:

Hardware

IBM-compatible PC with 500 MHz Pentium or higher processor

128+ MB RAM for work station/ 256+MB RAM for server.

4 GB hard drive disk space for sole use by the QCS system

3 1/2 inch high-density floppy drive

Compact disk (CD) Reader 8X speed or higher

SVGA or higher resolution monitor (1024X768, 256 colors)

Mouse or other pointing device.

Windows compatible printer. (Laser printer must have 4 MB+ of RAM)

Connection to the Internet, minimum 256k BPS

Software

MS Windows 98, ME, NT, or 2000

Word Processing software compatible with MS Word 97 or newer

Latest version of; Navigator, Microsoft Internet Explorer, or other browser that supports HTML 4.0 or higher

The Contractor's computer system shall be protected by virus protection software that is regularly upgraded with all issued manufacturer's updates throughout the life of the contract.

Electronic mail (E-mail) MAPI compatible.

1.4 RELATED INFORMATION

1.4.1 QCS User Guide

After contract award, the Contractor shall download instructions for the installation and use of QCS from the Government RMS Internet Website; the Contractor can obtain the current address from the Government. In case of justifiable difficulties, the Government will provide the Contractor with a CD-ROM containing these instructions.

1.4.2 Contractor Quality Control(CQC) Training

The use of QCS will be discussed with the Contractor's QC System Manager during the mandatory CQC Training class.

1.5 CONTRACT DATABASE

Prior to the pre-construction conference, the Government shall provide the Contractor with basic contract award data to use for QCS. The Government will provide data updates to the Contractor as needed, generally by files attached to E-mail. These updates will generally consist of submittal reviews, correspondence status, QA comments, and other administrative and OA data.

1.6 DATABASE MAINTENANCE

The Contractor shall establish, maintain, and update data for the contract in the QCS database throughout the duration of the contract. The Contractor shall establish and maintain the QCS database at the Contractor's site office. Data updates to the Government shall be submitted by E-mail with file attachments, e.g., daily reports, schedule updates, payment requests. If permitted by the Contracting Officer, a data diskette or CD-ROM may be used instead of E-mail (see Paragraph DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM). The QCS database typically shall include current data on the following items:

1.6.1 Administration

1.6.1.1 Contractor Information

The database shall contain the Contractor's name, address, telephone numbers, management staff, and other required items. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver Contractor administrative data in electronic format via E-mail.

1.6.1.2 Subcontractor Information

The database shall contain the name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor must be listed separately for each trade to be performed. Each subcontractor/trade shall be assigned a unique Responsibility Code, provided in QCS. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver subcontractor administrative data in electronic format via E-mail.

1.6.1.3 Correspondence

All Contractor correspondence to the Government shall be identified with a serial number. Correspondence initiated by the Contractor's site office shall be prefixed with "S". Letters initiated by the Contractor's home (main) office shall be prefixed with "H". Letters shall be numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C".

1.6.1.4 Equipment

The Contractor's QCS database shall contain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

1.6.1.5 Management Reporting

QCS includes a number of reports that Contractor management can use to track the status of the project. The value of these reports is reflective

of the quality of the data input, and is maintained in the various sections of QCS. Among these reports are: Progress Payment Request worksheet, QA/QC comments, Submittal Register Status, Three-Phase Inspection checklists.

1.6.2 Finances

1.6.2.1 Pay Activity Data

The QCS database shall include a list of pay activities that the Contractor shall develop in conjunction with the construction schedule. The sum of all pay activities shall be equal to the total contract amount, including modifications. Pay activities shall be grouped by Contract Line Item Number (CLIN), and the sum of the activities shall equal the amount of each CLIN. The total of all CLINs equals the Contract Amount.

1.6.2.2 Payment Requests

All progress payment requests shall be prepared using QCS. The Contractor shall complete the payment request worksheet and include it with the payment request. The work completed under the contract, measured as percent or as specific quantities, shall be updated at least monthly. After the update, the Contractor shall generate a payment request report using QCS. The Contractor shall submit the payment requests with supporting data by E-mail with file attachment(s). If permitted by the Contracting Officer, a data diskette may be used instead of E-mail. A signed paper copy of the approved payment request is also required, which shall govern in the event of discrepancy with the electronic version.

1.6.3 Quality Control (QC)

QCS provides a means to track implementation of the 3-phase QC Control System, prepare daily reports, identify and track deficiencies, document progress of work, and support other contractor QC requirements. The Contractor shall maintain this data on a daily basis. Entered data will automatically output to the QCS generated daily report. The Contractor shall provide the Government a Contractor Quality Control (CQC) Plan within the time required in Section 01451A, CONTRACTOR QUALITY CONTROL. Within seven calendar days of Government acceptance, the Contractor shall submit a data diskette or CD-ROM reflecting the information contained in the accepted CQC Plan: schedule, pay activities, features of work, submittal register, QC requirements, and equipment list.

1.6.3.1 Daily Contractor Quality Control (CQC) Reports.

QCS includes the means to produce the Daily CQC Report. The Contractor may use other formats to record basic QC data. However, the Daily CQC Report generated by QCS shall be the Contractor's official report. Data from any supplemental reports by the Contractor shall be summarized and consolidated onto the QCS-generated Daily CQC Report. Daily CQC Reports shall be submitted as required by Section 01451A, CONTRACTOR QUALITY CONTROL. Reports shall be submitted electronically to the Government using E-mail or diskette within 24 hours after the date covered by the report. Use of either mode of submittal shall be coordinated with the Government representative. The Contractor shall also provide the Government a signed, printed copy of the daily CQC report.

1.6.3.2 Deficiency Tracking.

The Contractor shall use QCS to track deficiencies. Deficiencies

identified by the Contractor will be numerically tracked using QC punch list items. The Contractor shall maintain a current log of its QC punch list items in the QCS database. The Government will log the deficiencies it has identified using its QA punch list items. The Government's QA punch list items will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of both QC and QA punch list items.

1.6.3.3 Three-Phase Control Meetings

The Contractor shall maintain scheduled and actual dates and times of preparatory and initial control meetings in QCS.

1.6.3.4 Accident/Safety Tracking.

The Government will issue safety comments, directions, or guidance whenever safety deficiencies are observed. The Government's safety comments will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of the safety comments. In addition, the Contractor shall utilize QCS to advise the Government of any accidents occurring on the jobsite. This brief supplemental entry is not to be considered as a substitute for completion of mandatory reports, e.g., ENG Form 3394 and OSHA Form 200.

1.6.3.5 Features of Work

The Contractor shall include a complete list of the features of work in the QCS database. A feature of work may be associated with multiple pay activities. However, each pay activity (see subparagraph "Pay Activity Data" of paragraph "Finances") will only be linked to a single feature of work.

1.6.3.6 QC Requirements

The Contractor shall develop and maintain a complete list of QC testing, transferred and installed property, and user training requirements in QCS. The Contractor shall update all data on these QC requirements as work progresses, and shall promptly provide this information to the Government via QCS.

1.6.4 Submittal Management

The Government will provide the initial submittal register, ENG Form 4288, SUBMITTAL REGISTER, in electronic format. Thereafter, the Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update, ENG Form 4288, shall be produced using QCS. RMS will be used to update, store and exchange submittal registers and transmittals, but will not be used for storage of actual submittals.

1.6.5 Schedule

The Contractor shall develop a construction schedule consisting of pay activities, in accordance with Contract Clause "Schedules for Construction Contracts", or Section 01320A, PROJECT SCHEDULE, as applicable. This schedule shall be input and maintained in the QCS database either manually

or by using the Standard Data Exchange Format (SDEF) (see Section 01320A PROJECT SCHEDULE). The updated schedule data shall be included with each pay request submitted by the Contractor.

1.6.6 Import/Export of Data

QCS includes the ability to export Contractor data to the Government and to import submittal register and other Government-provided data, and schedule data using SDEF.

1.7 IMPLEMENTATION

Contractor use of QCS as described in the preceding paragraphs is mandatory. The Contractor shall ensure that sufficient resources are available to maintain its QCS database, and to provide the Government with regular database updates. QCS shall be an integral part of the Contractor's management of quality control.

1.8 DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM

The Government-preferred method for Contractor's submission of updates, payment requests, correspondence and other data is by E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of computer diskettes or CD-ROM for data transfer. Data on the disks or CDs shall be exported using the QCS built-in export function. If used, diskettes and CD-ROMs will be submitted in accordance with the following:

1.8.1 File Medium

The Contractor shall submit required data on 3-1/2 inch double-sided high-density diskettes formatted to hold $1.44~\mathrm{MB}$ of data, capable of running under Microsoft Windows 95 or newer. Alternatively, CD-ROMs may be used. They shall conform to industry standards used in the United States. All data shall be provided in English.

1.8.2 Disk or CD-ROM Labels

The Contractor shall affix a permanent exterior label to each diskette and CD-ROM submitted. The label shall indicate in English, the QCS file name, full contract number, contract name, project location, data date, name and telephone number of person responsible for the data.

1.8.3 File Names

The Government will provide the file names to be used by the Contractor with the QCS software.

1.9 MONTHLY COORDINATION MEETING

The Contractor shall update the QCS database each workday. At least monthly, the Contractor shall generate and submit an export file to the Government with schedule update and progress payment request. As required in Contract Clause "Payments", at least one week prior to submittal, the Contractor shall meet with the Government representative to review the planned progress payment data submission for errors and omissions. The Contractor shall make all required corrections prior to Government acceptance of the export file and progress payment request. Payment requests accompanied by incomplete or incorrect data submittals will be

returned. The Government will not process progress payments until an acceptable QCS export file is received.

1.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification.

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SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

1.1.1 Government-Furnished Information

Submittal register [database and submittal management program] will be delivered to the contractor, by contracting officer [on 3 1/2 inch disk]. Register [database]will have the following fields completed, to the extent that will be required by the Government during subsequent usage.

- Column (c): Lists specification section in which submittal is required.
- Column (d): Lists each submittal description (SD No. and type, e.g. SD-04 Drawings) required in each specification section.
- Column (e): Lists one principal paragraph in specification section where a material or product is specified. This listing is only to facilitate locating submitted requirements. Do not consider entries in column (e) as limiting project requirements.
- Column (f): Indicate approving authority for each submittal. A "G" indicates approval by contracting officer; a blank indicates approval by QC manager.

[The database and submittal management program will be extractable from the disk furnished to contractor, for operation on contractor's IBM compatible personal computer with $640 \, \text{kb}$ RAM, a hard drive, and $3 \, 1/2$ inch high density floppy disk drive.]

1.2 DEFINITIONS

1.2 Submittal

Shop drawings, product data, samples, and administrative submittals presented for review and approval. Contract Clauses "FAR 52.236-5, Material and Workmanship," paragraph (b) and "FAR 52.236-21, Specifications and Drawings for Construction," paragraphs (d), (e), and (f) apply to all "submittals."

1.3 Types of Submittals

All submittals are classified as indicated in paragraph "Submittal Descriptions (SD)". Submittals also are grouped as follows:

- a. Shop drawings: As used in this section, drawings, schedules, diagrams, and other data prepared specifically for this contract, by contractor or through contractor by way of subcontractor, manufacturer, supplier, distributor, or other lower tier contractor, to illustrate portion of work.
- b. Product data: Preprinted material such as illustrations, standard schedules, performance charts, instructions, brochures, diagrams, manufacturer's descriptive literature, catalog data, and other data to illustrate portion of work, but not prepared exclusively for this contract.
- c. Samples: Physical examples of products, materials, equipment, assemblies, or workmanship that are physically identical to portion of work, illustrating portion of work or establishing standards for evaluating appearance of finished work or both.
- d. Administrative submittals: Data presented for reviews and approval to ensure that administrative requirements of project are adequately met but not to ensure directly that work is in accordance with design concept and in compliance with contract documents.

1.4 Submittal Descriptions (SD)

SD-01 Preconstruction Submittals

Certificates of insurance
Surety bonds
List of proposed subcontractors
List of proposed products
Construction Progress Schedule
Submittal schedule
Schedule of values
Health and safety plan
Work plan
Quality control plan
Environmental protection plan

SD-09 Manufacturer's Field Reports

Documentation of the testing and verification actions taken by manufacturer's representative to confirm compliance with manufacturer's standards or instructions.

Factory test reports.

1.5 SUBMITTAL CLASSIFICATION

Submittals are identified with submittal description (SD) numbers and are classified as follows:

1.5.1 Government Approved

Governmental approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

1.5.2 Designated Reviewers

The organization designated to perform the review for approval for items requiring Government approval (GA) is identified by acronym in the REVIEWER column on the SUBMITTAL REGISTER, ENG FORM 4288 or ENG FORM 4288 (RMS). Following is a list of the acronyms used and their full description:

AOF = The Resident U.S. Army Corps of Engineers Area Office

RED = Real Estate Division, Detroit District, U.S. Army Corps of Engineers

AEN = The Architect/Engineer firm that designed the project

ECD = Engineering and Construction Division, Detroit District, U.S. Army Corps of Engineers

1.6 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.7 DISAPPROVED SUBMITTALS

When a submittal is returned to the Contractor and marked "DISAPPROVED" or "APPROVED AS NOTED, REVISE AND RESUBMIT", the Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

1.8 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION3.1 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Submittals shall be made in the required number of copies and to the applicable Area Office. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and stamped in accordance with ARTICLE titled STAMPS, and approved by the CQC representative. Each respective transmittal form (ENG FORM 4025) shall be signed and dated by the CQC representative certifying that the accompanying submittal complies with the contract requirements. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

3.2 SUBMITTAL REGISTER (ENG FORM 4288)

In Section 01999, is one set of ENG Form 4288 listing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. The Contractor will also be given the submittal register as a diskette containing the computerized ENG Form 4288 and instructions on the use of the diskette. Columns "d" through "r" have been completed by the Government; the Contractor shall complete columns "a" and "s" through "u" and submit the forms (hard copy plus associated electronic file) to the Contracting Officer for approval within 10 calendar days after receipt of the Notice to Proceed. The Contractor shall keep this diskette up-to-date and shall submit it to the Government together with the monthly payment request. The approved submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract. The submittal register and the progress schedules shall be coordinated.

3.2.1 Resident Management System

Reference is made to the RMS specified in PART 3 of SECTION 01451, CONTRACTOR QUALITY CONTROL and the applicable SUBMITTAL INFORMATION form enclosed in SECTION 01999. The Contractor is not required to make duplicate submittals and shall use the RMS form in lieu of ENG FORM 4288. An RMS software module will be supplied to the Contractor for running and utilizing the RMS program.

3.3 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted

concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 10 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals. An additional 5 calendar days shall be allowed and shown on the register for review and approval of submittals for refrigeration and HVAC control systems.

3.4 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) enclosed in SECTION 01999 shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor, or may be copied from the enclosed form. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

3.5 SUBMITTAL PROCEDURE

Submittals shall be made as follows:

3.5.1 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

3.6 CONTROL OF SUBMITTALS

The Contractor shall carefully control its procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

3.7 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. The distribution of approved copies will be as specified in the Clause titled "SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION".

3.8 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals.

3.9 RESERVATION OF RIGHTS

The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring

removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

3.10 STAMPS

Stamps, approximately 2 inches high by 3 inches wide, and similar to the following, shall be used by the Contractor on the submittal data to validate approval:

CONTRACTOR
(Firm Name)
Approved
Approved with corrections as noted on submittal data and/or attached sheets(s).
SIGNATURE:
TITLE:
DATE:

3.11 ACCIDENT PREVENTION PLAN

The format of the Contractor's Accident Prevention Plan shall be in accordance with APPENDIX A, MINIMUM BASIC OUTLINE FOR ACCIDENT PREVENTION PLAN of the SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385 1-1, 3 Sept 1996. A copy of NCE FORM 129 is included in SECTION 01999 for use in preparing activity hazard analysis documentation.

-- End of Section --

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SECTION 01451

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SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with SECTION 01330, entitled "SUBMITTAL PROCEDURES":

SD-01 Data

Quality Control Plan; G-AOF

At least ten (10) calendar days prior to commencing work submit a Quality Control Plan.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with Clause titled "INSPECTION OF CONSTRUCTION." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both on-site and off-site, and shall be keyed to the proposed construction sequence. The project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with quality requirements specified in the contract. The project superintendent in this context shall mean the individual with the responsibility for the overall management of the project including quality and production.

3.2 QUALITY CONTROL PLAN

3.2.1 General

The Contractor shall furnish for review by the Government, not later than 30 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of Clause titled "INSPECTION OF CONSTRUCTION." The plan shall identify personnel, procedures, control, instructions, records, and forms to be used. The Government will consider an interim plan for the first 30 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

3.2.2 Content of the CQC Plan

The CQC plan shall include, as a minimum, the following to cover all construction operations, both on-site and off-site, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. Information required in the paragraph titled "IMPLEMENTATION OF GOVERNMENT RESIDENT MANAGEMENT SUSTEM (RMS)" shall be incorporated into the Contractor's Quality Control plan, as applicable.
- b. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC system manager who shall report to the project superintendent.
- c. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- d. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities and responsibilities. Copies of these letters shall also be furnished to the Government.
- e. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators suppliers, and purchasing agents. These procedures shall be in accordance with SECTION 01330, "SUBMITTAL PROCEDURES".
- f. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities will be approved by the Contracting Officer.)
- g. Procedures for tracking preparatory, initial, and follow-up control phases, including documentation.
- h. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures will establish verification that identified deficiencies have been corrected.
- i. Reporting procedures, including proposed reporting formats.
- j. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may be generally considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list shall be as agreed upon during the coordination meeting.

3.2.3 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in its CQC plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.4 Notification of Changes

After acceptance of the CQC plan, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 COORDINATION MEETING

Immediately after adjournment of the required Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the Quality Control Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC plan shall be submitted in draft form for a review a minimum of 3 working days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, administration of the system for both on-site and off-site work, and the interrelationship of the Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting will be prepared by the Government and are to be signed by both the Contractor and the Contracting Officer or the Contracting Officer's Representative. The minutes shall be separate from the Preconstruction Conference minutes and shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.3.1 Finalize CQC Plan

Immediately following the Preconstruction Conference, the Contractor shall finalize the CQC plan, taking into account comments made at the conference, and shall formally submit the CQC plan for acceptance. The Contractor shall allow up to 10 calendar days for review and acceptance of the finalized submittal.

3.4 OUALITY CONTROL ORGANIZATION

3.4.1 General

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure contract compliance. The Contractor shall provide a CQC organization which shall be at the site at all times during progress of the work and with complete authority to take any action necessary to ensure compliance with the contract. All CQC staff members shall be subject to acceptance by the Contracting Officer.

3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the on site work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the

Contractor. This CQC System Manager shall be a construction person with a minimum of 3 years in related work. This CQC system manager shall be on site at all times during construction and shall be employed by the prime Contractor The CQC System Manager shall be assigned as System Manager but may have duties as project superintendent in addition to quality control. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

3.4.3 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times that the work related to the applicable skill is ongoing. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

3.5 Additional Requirements

In addition to the above experience and education requirements the CQC System Manager shall have completed the course titled "Construction Quality Management For Contractors". This course is periodically offered at one or more of the Area Offices within the District.

3.6 SUBMITTALS

Submittals shall be as specified in SECTION 01330, titled "SUBMITTAL PROCEDURES". The CQC organization shall be responsible for certifying that all submittals are in compliance with the contract requirements.

3.7 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors, complies with the requirements of the contract. The controls shall be adequate to cover all construction operations and will be keyed to the proposed construction sequence. The controls shall include at least three phases of control to be conducted by the CQC system manager for all definable features of work, as follows:

3.7.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.
- d. Review of provisions have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the

contract.

- f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
- g. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.
- j. Discussion of the initial control phase.
- k. The Government shall be notified at least 24 hours in advance of beginning any of the required action of the preparatory control phase. This phase shall include a meeting conducted by the CQC system manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by a completed Preparatory Inspection Checklist and by separate minutes prepared by the CQC system manager and attached to the daily QC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.7.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of preliminary work to ensure that it is in compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government shall be notified at least 24 hours in advance of beginning the initial phase. A completed initial inspection checklist of this phase shall be prepared by the CQC system manager and attached to the daily QC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work on-site, or any time acceptable specified quality standards are not being met.

3.7.3 Follow-up Phase

Daily checks shall be performed to assure continuing compliance with contract requirements until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

3.7.4 Implementation of Government Resident Management System (RMS)

The Contractor shall utilize the Government-furnished CQC Management Report, NCE Form 63 for its daily reports. (Copy enclosed in SECTION 01999). Other Contractor desired reporting forms may be used in addition to this form. The Contractor shall use a government-furnished RMS CQC computer module for managing the quality control for this project. On the Government-furnished Input Forms in SECTION 01999 for use with the RMS, the Contractor shall provide the following information:

- (1) Prime Contractor staffing
- (2) letter codes which the Contractor wishes to use in addition to those supplied with the program libraries. A list of current existing codes is provided in SECTION 01999.
- (3) subcontractor information showing trade, name, address, and insurance expiration dates
- (4) Definable features of work from a Government provided dictionary (may be expanded by the Contractor, as approved).
- (5) Pay activity and activity information, including minimum and maximum durations for each activity on a separate listing. The sum of all activity values shall equal the contract amount and, all Bid Items and Additives shall be separately identified, in accordance with the BIDDING SCHEDULE. Bid Items may include multiple activities, but activities may only be assigned to one such Bid Item. All of the data listed in this Subpart 6 shall be provided and the RMS CQC module shall be completed to the satisfaction of the Contracting Officer prior to any contract payments (except payments for bonds, insurance and/or mobilization as approved by the Contracting Officer) and shall be updated as required.
- (6) Required Quality Control tests (as applicable) tied to individual activities. The QC Reports/QC Requirements function of the RMS QC Module will be used to meet the requirements for tracking of verification and acceptance testing specified in the paragraph titled "Content of the CQC Plan".
- (7) Submittal information relating to specification section, bid item number, description, activity number, review period and expected procurement period
- (8) User schooling information (as applicable).

The above items shall be incorporated into the required submittal for the

Contractor's Quality Control Plan required in the paragraph titled "QUALITY CONTROL PLAN" of this Section.

- a. During the course of the contract, the Contractor will receive various Quality Assurance comments from the Government that will reflect corrections needed to Contractor activities or reflect outstanding or future items needing the attention of the Contractor. The Contractor shall acknowledge receipt of these comments by specific number reference on its Daily CQC Report, and will also reflect on his Daily CQC Report when these items are specifically completed or corrected to permit Government verification. The contractor will use the QC COMMENTS function of the RMS QC Module to meet the requirements for tracking construction deficiencies as specified in paragraph titled, "Content of the CQC Plan".
- b. The Contractor's schedule system shall include, as specified and separate activities, all Preparatory Phase Meetings (inspections); all O&M Manuals (as applicable) and all Test Plans of Electrical and Mechanical Equipment or Systems that require validation testing or instructions to Contracting Officer Representatives (as applicable).

3.7.5 Additional Preparatory and Initial Phases

Additional preparatory and initial phases may be conducted on the same definable features of work as determined by the Government if the quality of on-going work is unacceptable; or if there are changes in the applicable QC staff or in the on-site production supervision or work crew; or if work on a definable feature is resumed after a substantial period of inactivity, or if other problems develop.

3.8 DOCUMENTATION

The Contractor shall maintain Daily Inspection Reports of quality control operations, activities, and tests performed, including the work of subcontractors. These records shall be on an acceptable form and shall include factual evidence that required quality control activities and/or tests have been performed, including but not limited to the following:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed today, giving location, description, and by whom. For dredging projects, the report shall always include the character and types of materials removed. Whenever there is a significant change in the materials, the location of such change shall be included in the reports.
- d. Control activities performed with results and references to specifications/plan requirements. The control phase should be identified (Preparatory, Initial, Follow-up). List deficiencies noted along with corrective action.
- e. Quantity of materials received at the site, with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Identify submittals reviewed, with contract reference, by whom, and

action taken.

- g. Off-site surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. List instructions given/received and conflicts in plans and/or specifications.
- j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that the workmanship complies with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date(s)covered by the report, except that reports need not be submitted for days on which no work is performed. All calendar days shall be accounted for throughout the life of the contract. The first report following a period of no work shall be for that day and all the no-work days since the last reported work day. Reports shall be sequentially numbered for this project, signed and dated by the CQC system manager. The report from the CQC system manager shall include copies of reports prepared by all subordinate quality control personnel.

3.9 SAMPLE FORMS

Sample forms for the CQC Management Report, Preparatory Inspection Checklist, Initial Inspection Checklist, and other required reports and plans are enclosed in SECTION 01999. The Contractor shall tailor the checklists to include all reporting and quality control requirements specific to this project.

3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor at the site of the work, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor or subcontractor.

--End of Section--

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SECTION 01999

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- PART 3 EXECUTION (NOT APPLICABLE)
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SECTION 01999

LISTING OF ENCLOSED DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

PART 1 GENERAL

1.1 ENCLOSURES

This Section contains documents referenced in other Sections of the specifications. They are consolidated in this Section for the convenience of the Contractor and the Government. The Contractor may reproduce the enclosed forms for its use or obtain a supply of the forms from the Contracting Officer.

TITLE

CONSTRUCTION QUALITY MANAGEMENT REPORT - NCE FORM 63, 6 MAY 77. (2 Sides)

PREPARATORY INSPECTION CHECKLIST (3 SIDES)

INITIAL INSPECTION CHECKLIST (2 SIDES)

ACCIDENT PREVENTION PROGRAM ACTIVITY HAZARD ANALYSIS-NCE FORM 129, 6 JUNE 1986.

RESIDENT MANAGEMENT SYSTEM FORMS

- A. CURRENT ACTIVITY SYSTEM FORMS
- B. INITIAL INSPECTION WORKSHEET
- C. PREPARATORY INSPECTION WORKSHEET
- D. CONTRACTOR QUALITY CONTROL REPORT
- E. TRANSMITTAL SHEET (4025 -R)

SUBMITTAL REGISTER - ENG FORM 4288, MAY 91

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATIONS OF COMPLIANCE ENG FORM 4025, MAY 91 (2 SIDES)

REPORT OF OPERATIONS - PIPELINE, DIPPER OR BUCKET DREDGES - 4 267, JAN 70 (2 SIDES)

NOTICE TO MARINERS FORM

OVERDEPTH AND TOLERANCE DRAWINGS

BENCHMARKS AND HORIZONTAL CONTROL DATA

GENERAL DECISION NO. IL020018

GENERAL DECISION NO. MI020062

- PART 2 PRODUCTS (NOT APPLICABLE)
- PART 3 EXECUTION (NOT APPLICABLE)
- -- END OF SECTION --

CONSTRUCTION QUALITY CONTROL MANAGEMENT

DATE			REPORT	
CONTRACTOR		CONTRACT NO		
PROJECT NAME		LOCATION		
WEATHER TYPE	TEMP. MAX	MIN RAINFALI	L GAGE READING_	
EMPLOYEES: SUPV	SKILLED	LABORERS	LENGTH OF SHIFT	HR
WORK RESPONSIBIL	ITY: NAME (PRIME	OR SUBCONTRACTOR) A	AND AREA OF RESPONSIBII	LITY .
	,	·		
В.				
C				
D				
E				
WORK PERFORMED TO		ESCRIPTION, QUANTITY AN s on the Progress Chart or C	ID RESPONSIBILITY BY LETTE PM)	R REFERENCE
	(10000000000000000000000000000000000000	g on the Progress chart of C.		
INSPECTION: (DESCI		ECTION AND LOCATION	N. INCLUDE OFF-SITE, MA	ATERIALS ANI
A. PREPARATORY P	HASE:			
B. INITIAL PHASE:				
C. CONTINUOUS PHA	SE:			
RESULTS OF INSPECT	ΓΙΟΝ: (INCLUDE FI	NDINGS, DEFICIENCIES (DBSERVED & CORRECTIVE	ACTION)
	•			•

SECTION 01999 Page

EDITION OF 22 JUNE 76 IS OBSOLETE

NCE FORM 63 6 MAY 77

RESULTS OF SURVEILLANCE CONTINUED:
TEST PERFORMED: TYPE, LOCATION, RESULTS INCLUDING FAILURES & REMEDIAL ACTION, (ATTACH COPY OF TEST REPORT OR NOTATION WHEN IT WILL BE FURNISHED.)
WORK ITEMS BEHIND SCHEDULE: REASON, EFFECT ON PROGRESS SCHEDULE AND ACTION TAKEN.
JOB SAFETY: (REPORT CONDITIONS, DEFICIENCIES, CORRECTIVE ACTION & RESULTS.)
REMARKS: LIST ATTACHMENT AND OTHER MANAGEMENT ACTIONS TAKEN TO ASSURE QUALITY CONSTRUCTION
IF INSPECTION & RESULTS ARE NOT LISTED THEN IT IS ASSUMED THAT QUALITY CONTROL IS NOT BEING IMPLEMENTED. THE ABOVE REPORT IS COMPLETE AND CORRECT AND ALL MATERIALS & SUPPLIES INCORPORATED IN THE WORK ARE IN COMPLIANCE WITH THE TERMS OF THE CONTRACT EXCEPT AS NOTED:
CONTRACTOR'S APPROVED REPRESENTATIVE SIGNATURE

PREPARATORY INSPECTION CHECKLIST

CONTRACT NO:		DATE:	
TITLE:		SPECS	. SECTION:
MAJOR DEFINABLE SEGMEN	T OF WORK:_		
A. PERSONNEL PRESENT:			
<u>NAME</u>	<u>PO</u>	<u>SITION</u>	COMPANY
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
B. TRANSMITTAL INVOLVED <u>NUMBER & ITEM</u>	o: <u>CODE</u>	<u>CONTRACTO</u>	R OR GOVERNMENT APPROVAL
1			
2			
3			
4			
5			

PREPARATORY INSPECTION CHECKLIST

B-I. Have all items involved been approved	Yes	_ No
B-II. What item have not been approved?		
<u>ITEM</u> 1	<u>STATUS</u>	
2		
3		
4		
5		
C. Are all materials on hand?	Yes	No
C-I. Are all materials on hand accordance with	approvals? Yes_	No
C-II. Items not on hand or not in accordance wi	th transmittals:	
1		
2		
3		
4		
D. Test required in accordance with contract re	equirements:	
<u>TEST</u> 1	<u>PARAGRAPI</u>	<u>H</u>
2		
3		

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PREPARATORY INSPECTION CHECKLIST

QUALITY CONTROL – PRIME CONTRACTOR

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INITIAL INSPECTION CHECKLIST

CONTRACT NO:		DATE:
Description and Location of Work	Inspected:	
	Specs. Se	ection:
REFERENCE CONTRACT DRAW	VING:	
A. PERSONNEL PRESENT :		
NAME	POSITION	COMPANY
2		
3		
l		
5		
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·		
3		
)		
0		
B. MATERIALS BEING USED AI	RE IN STRICT COMPLIANCE V	WITH THE CONTRACT DI ANS
		WIIII IIIL CONTRACT ILANS
AND SPECIFICATION: YES		
F NOT,EXPLAIN:		

INITIAL INSPECTION CHECKLIST

C. PROCEDURES AND WORK METHODS WITNESSED ARE IN STRICT COMPLIANCE WITH					
THE REQUIREMENTS OF THE CONTRACT SPECIFICATIONS: YES NO_					
IF NOT, EXPLAIN:					
D. WORKMANSHIP IS ACCEPTABLE: YES NO STATE AREAS V	WHERE				
IMPROVEMENT IS NEEDED:					
E. SAFETY VIOLATIONS AND CORRECTIVE ACTION TAKEN:					
QUALITY CONTROL REPRES	ENTATIVE				

Page 2 of 2

ACCIDENT PREVENTION PROGRAM ACTIVITY HAZARD ANALYSIS

Dogo	o.f
Page	OI

1. Contract No.		2. Project	3. Facility	
4. Date		5. Location	6. Estimated Start Date	
7. Item	8. Phase of Work	9. Safety Hazard	10. Precautionary Action Taken	
11. Contra	ctor (Signature & Date)	1	1	
12. Report discussed with contractor/ superintendent on			13. Contracting Officer (Signature & Date)	



Current Activity Summary

Project Name: Repair of North & South Piers, Baloney Harbor, MI Contract Number: DACW35-02-C-####

Location Name

Activity Number	Activity Description	QUANTITY	UNIT PRICE	AMOUNT
CLIN 0001	North and South Pier Repairs	1	\$3,437,787.18 / LS	\$3,437,787.18
1001	Bonds			\$49,136.00
1002A	Prepare & Mobilize Equipment			\$94,864.00
1002B	Prepare Site			\$72,500.00
1002C	Office Trailers & Utilities			\$22,500.00
1003A	Demobilize Equipment			\$5,000.00
1003B	Site Restoration			\$2,500.00
1003C	As-Built Drawings			\$2,500.00
1004A	Furnish SSP			\$750,000.00
1004B	Furnish Special Piles			\$50,000.00
1004C	Furnish SSP Pile Shoes			\$30,000.00
1004D	Fabricate Template			\$6,000.00
1004E	Excavate Driving Line			\$100,000.00
1004F	Set & Drive SSP			\$500,000.00
1004G	Backfill Driving Line			\$50,000.00
10041	South Driving Line Obstruction Removal			\$117,787.18
1005A	Furnish Misc. Steel			\$193,000.00
1005B	Furnish Tie-Rods			\$20,000.00
1005C	Furnish Plate Washers			\$15,000.00
1005D	Furnish Fastners			\$12,000.00
1005E	Place Misc. Steel			\$280,000.00
1006A	Demo Concrete & Remove (Rubblemound)			\$100,000.00
1006A	Excavate Existing Cribs (Rubblemound Area)			\$185,000.00
1006C	Disposal of Demo Materials (Rubblemound Area)			\$25,000.00
1007A	Furnish H-Pile Materials			\$22,800.00
1007A	Install H-Piles			\$27,200.00
1007B	Furnish Rebar			\$135,000.00
1008A	Place Concrete (2000 CY @ \$250.00/CY)			\$500,000.00
1008B	Furnish Handrails			\$60,000.00
1009A	Place Handrails			\$7,000.00
1009B	Paint Handrails			
10090	Fairit Hariurans			\$3,000.00 \$3,437,787.18
CLIN 0002	Fill Stone:	0	\$0.00 / NA	\$0.00
	No Activities Assigned	to this Bid Item.	· · · · · · · · · · · · · · · · · · ·	·
CLIN 0002AA	First 18,000 tons	18,000	\$22.50 / TN	\$405,000.00
2001	Furnish & Place Fill Stone - 1st 18,000 Tons			\$405,000.00
				\$405,000.00
CLIN 0002AB	Over 10,000 tons	2,000	\$22.50 / TN	\$45,000.00
2101	Furnish & Place Fill Stone - Over 18,000 Tons			\$45,000.00
				\$45,000.00
CLIN 0003	Underlayer Stone:	0	\$0.00 / NA	\$0.00
	No Activities Assigned	to this Bid Item.		
CLIN 0003AA	First 4,500 Tons	4,500	\$31.50 / TN	\$141,750.00
3001	Furnish & Place Underlayer Stone - 1st 4,500 Tons			\$141,750.00
				\$141,750.00
CLIN 0003AB	Over 4,500 tons	450	\$31.50 / TN	\$14,175.00
3101	Furnish & Place Underlayer Stone - Over 4,500 Tons			\$14,175.00
				\$14,175.00
CLIN 0004	Scour Stone:	0	\$0.00 / NA	\$0.00
	Dage 4 of			





Current Activity Summary

Project Name: Repair of North & South Piers, Baloney Harbor, MI Contract Number: DACW35-02-C-####

Location Name

Activity Number	Activity Description	QUANTITY	UNIT PRICE	AMOUNT
CLIN 0004	Scour Stone: (Continued)	0	\$0.00 / NA	\$0.00
	No Activities Assig	ned to this Bid Item.		
CLIN 0004AA	First 3,500 tons	3,500	\$27.50 / TN	\$96,250.00
4001	Furnish & Place Scour Stone - 1st 3,500 Tons			\$96,250.00
				\$96,250.00
CLIN 0004AB	Over 3,500 tons	600	\$27.50 / TN	\$16,500.00
4101	Furnish & Place Scour Stone - Over 3,500 Tons			\$16,500.00
				\$16,500.00
CLIN 0005	Bedding Stone:	0	\$0.00 / NA	\$0.00
	No Activities Assig	ned to this Bid Item.		
CLIN 0005AA	First 3,000 tons	3,000	\$28.00 / TN	\$84,000.00
5001	Furnish & Place Bedding Stone - 1st 3,000 Tons			\$84,000.00
				\$84,000.00
CLIN 0005AB	Over 3,000 tons	600	\$28.00 / TN	\$16,800.00
5101	Furnish & Place Bedding Stone - Over 3,000 Tons			\$16,800.00
				\$16,800.00
CLIN 0006	Armor Stone:	0	\$0.00 / NA	\$0.00
	No Activities Assig	ned to this Bid Item.		
CLIN 0006AA	First 6,000 tons	6,000	\$34.00 / TN	\$204,000.00
6001	Furnish & Place Armor Stone - 1st 6,000 Tons			\$204,000.00
				\$204,000.00
CLIN 0006AB	Over 6,000 tons	825	\$34.00 / TN	\$28,050.00
6101	Furnish & Place Armor Stone - Over 6,000 Tons			\$28,050.00
				\$28,050.00

Sum of CLINs \$4,489,312.18 **Sum of Activities** \$4,489,312.18 \$0.00 Difference

North & South Pier Repair, Baloney Harbor, MI DACW35-02-C-#### **Grand Haven Area Office**

INITIAL INSPECTION WORKSHEET

DEFINABLE FEATURE OF WORK: Site Cast Concrete

A. ACTIVITIES INCLUDED UNDER Site Cast Concrete -

ABC Company, Inc

1008A Furnish Rebar \$135,000.00 1008B Place Concrete (2000 CY @ \$250.00/CY) \$500,000.00

\$635,000.00

B. QUALITY CONTROL REQUIREMENTS -

SUBMITTALS REQUIRED -	
00700 1	

DIVI	LIALOIN				
	00700	1	SF 1413 for Subcontracts		Not submitted
	03250	1	Expansion Joint Materials	A	Approved
	03307	1	Batching and Mixing Equipment	F	Receipt
	03307	2	Conveying and Placement Equipment	F	Receipt
	03307	3	Reinforcing Steel (Mat Steel, Bar Steel	Α	Approved
	03307	4	Concrete Mixture Proportions;	Α	Approved
	03307	5	Cementitious Material	Α	Approved
	03307	6	Aggregates	Α	Approved
	03307	7	Manufacturer's Literature	Α	Approved
	03307	8	Batching & Mixing Equipment - Redi-Mix	F	Receipt
	03307	9	Conveying & Placing Equipment - Redi-Mix	F	Receipt
	03307	10	Concrete Mix Proportions - Redi-Mix	Α	Approved
	03307	11	Cementitious Material - Redi-Mix	Α	Approved
	03307	12	Aggregates - Redi Mix	Α	Approved
	03307	13	Manufacturer's Data; AEA - Redi-Mix	Α	Approved
	03307	14	Manufacturer's Data; WRA - Redi-Mix	Α	Approved
	05500	2	Welders	F	Receipt
	05552	4	Mill Certs - Ladder Grab Rails	Α	Approved

QC TESTS -

CT # 00001 Obtain 1 Cylinder for strength testing at 7 days and 2 Cylinders for 28 days. Minimum of Not Performed one set per day or 1 set per every 150 CY placed. (ASTM C-94)

Required strength at 7 Days = 2,800 p.s.i.; 28 Days = 4,000 p.s.i.

CT # 00002 Check Batch slips for water/cement ratio not to execeed 0.40 by weight Not Performed

Check Slump at both mixer and discharge ends: CT # 00003

Not Performed

Pumped = 3" - 7" at discharge Maximum of 5" at Mixer if no admixture used

Maximum of 7" at mixer if admixture is used

2 checks per shift is minimum required

CT # 00004 2 Air Content tests required per shift. Check approved mix design for maximum and Not Performed

minimum values acceptable.

C. QA/QC PUNCH LIST ITEMS -

North & South Pier Repair, Baloney Harbor, MI DACW35-02-C -### Grand Haven Area Office

INITIAL INSPECTION WORKSHEET

	DEFINABLE FE	EATURE OF	WORK : Site Cast	Concrete		
c. c	A/QC PUNCH LIST ITEMS - Cont. INCLUDE ADDITIONAL COMMENTS ON DA					
D. L	ABOR RATES -	BASIC	FRINGE	PLUS	TOTAL	
- - -	CLASSIFICATIONS	RATE	BENEFITS	% ————————————————————————————————————	WAGE/HF	₹
- E. II	NSPECTION CHECKS -					N COMPLIANCE
	Check rebar for proper bar sizes, per approvement of the control o	des and top s e Governmen degree of bro luring placem	urface. t Representative. I oming. ent and finishing o	f the concrete		Yes/ No/ NA
9. 10 <u>.</u>						
	OB SITE SAFETY -	ed to wear we	orlanasta (DEDa)		II	N COMPLIANCE Yes/ No/ NA
7	All employees working over water are require All employees are to wear hard hats. Concrete Pump must be shut down prior to Review Activity Hazard Analysis for Concrete	cleaning. e Work prior t	o performing this v			
8 G. C	A Evaluation Notes -					DISCUSSED
۷.						Yes/ No/ NA

North & South Pier Repair, Baloney Harbor, MI DACW35-02-C-#### Grand Haven Area Office

PREPARATORY INSPECTION WORKSHEET

DEFINABLE FEATURE OF WORK: Site Cast Concrete

A. ACTIVITIES INCLUDED UNDER Site Cast Concrete - ABC Company, Inc. 1008A Furnish Rebar 1008B Place Concrete (2000 CY @ \$250.00/CY) B. QUALITY CONTROL REQUIREMENTS - SUBMITTALS REQUIRED -		\$135,000.00 \$500,000.00 \$635,000.00
1008A Furnish Rebar 1008B Place Concrete (2000 CY @ \$250.00/CY) B. QUALITY CONTROL REQUIREMENTS -		\$500,000.00
1008B Place Concrete (2000 CY @ \$250.00/CY) B. QUALITY CONTROL REQUIREMENTS -		\$500,000.00
		\$635,000.00
SUBMITTALS REQUIRED -		
00700 1 SF 1413 for Subcontracts		Not submitted
03250 1 Expansion Joint Materials 03307 1 Batching and Mixing Equipment 03307 2 Conveying and Placement Equipment 03307 3 Reinforcing Steel (Mat Steel, Bar Steel 03307 4 Concrete Mixture Proportions; 03307 5 Cementitious Material 03307 6 Aggregates 03307 7 Manufacturer's Literature 03307 8 Batching & Mixing Equipment - Redi-Mix 03307 9 Conveying & Placing Equipment - Redi-Mix 03307 10 Concrete Mix Proportions - Redi-Mix 03307 11 Cementitious Material - Redi-Mix 03307 12 Aggregates - Redi Mix 03307 13 Manufacturer's Data; AEA - Redi-Mix 03307 14 Manufacturer's Data; WRA - Redi-Mix 05500 2 Welders 05552 4 Mill Certs - Ladder Grab Rails C. QA/QC PUNCH LIST ITEMS -	_ A F F A A A A A F F A A A A A F A	Approved Receipt Receipt Approved Approved Approved Approved Approved Receipt Receipt Approved Receipt Approved
INCLUDE ADDITIONAL COMMENTS ON DAILY REPORT		<u></u>
D. LABOR RATES - LABOR BASIC FRINGE PLUS RATE BENEFITS %	\	TOTAL WAGE/HR

12 Jul 2002

North & South Pier Repair, Baloney Harbor, MI DACW35-02-C -#### Grand Haven Area Office

PREPARATORY INSPECTION WORKSHEET

DEFINABLE FEATURE OF WORK : Site Cast Concrete

SPECIFICATIONS -	
COMMENTS / CONFLICTS	
	DISCUSSED Yes/ No/ NA
ON PREVIOUS PROJECTS -	DISCUSSED
	Yes/ No/ NA
	IN COMPLIANCE
	Yes/ No/ NA
	IN COMPLIANCE
	IN COMPLIANCE Yes/ No/ NA
NOTES -	DISCUSSED
	Yes/ No/ NA
	NOTES -

REPORT NUMBER CONTRACTORS QUALITY CONTROL REPORT (QCR) 92 Page 1 of 2 DAILY LOG OF CONSTRUCTION - CIVIL DATE 22 Jun 2001 - Friday **PROJECT** CONTRACT NUMBER North & South Pier Repair, Baloney Harbor, MI DACW35-02-C-#### NA CONTRACTOR WEATHER Weather Caused No Delay ABC Company, Inc. 555 Imagination Road, Fantasy, MI 49494 Temperature Min 80 °F, Max 63 °F; 0.01 IN Precipitation; 10 MPH Wind **QC NARRATIVES Activities in Progress:** Set and drove 24 sheets of SSP Installing Miscellaneous Steel Waler sections c/s 4+00W to 4+50W 123 Tons of Fill stone placed between existing structure and req'd SSP wall from c/s 6+25 W to 6+75W. Safety Inspection / Safety Meetings: Weekly Safety Meeting held today - Use of PPE - Hrad hats & Work Vests PREP/INITIAL DATES (Preparatory and initial dates held and advance notice) A preparatory inspection was held today for the following feature: Miscellaneous Steel & Handrail An initial inspection was held today for the following feature: Miscellaneous Steel & Handrail **ACTIVITY START/FINISH** The following activity was started today: Activity No Description Furnish & Place Fill Stone - 1st 18.000 Tons 2001 No activities were finished today **QC REQUIREMENTS** The following 4 QC requirements were completed today: Requirement No Type Description Results CT-00001 QC Testina Check Plumbness of piles during driving Completed CT-00002 QC Testina Check horizontal placement of piling (Check for Pile-Walk) Completed CT-00003 QC Testing Check vibratory hammer driving rate for SSP - 12"/minute is the minimum rate. If Completed exceeded, switch to Impact hammer. CT-00004 QC Testing Video Tape Interlocks of piling after driving SSP Completed **QA/QC PUNCH LIST** (Describe QC Punch List items issued, Report QC and QA Punch List items corrected) The following QC Punch List item was issued today: Item No Location QC-00001 4+25W Cut-off sheets to finish grade from 4+00W to 4+50W No Punch List items were corrected today CONTRACTORS ON SITE (Report first and/or last day contractors were on site) No contractors had their first or last day on site today **LABOR HOURS** The following labor hours were Reported today: Number of Hours Labor Classification Employees Worked **IRONWORKER** 3.0 10.0 PILE DRIVING SETTER 10.0

2.0

	S QUALITY CONTRO	L REPORT (QCR)		REPORT NUMBER 92 Page 2 of 2						
	OF CONSTRUCTION		DATE							
			22 J	22 Jun 2001 - Friday						
PROJECT North & South Pier R	Repair, Baloney Harbor, MI			CONTRACT NUMBER DACW35-02-C-####						
ABC Company, Inc.	PILE DRIVER OPERATOR	2	Total	1.0	10.0					
Total hours worked to date:	30.0		Total	6.0	30.0					
EQUIPMENT HOURS										
The following equipment h	ours were Reported to	day:		Standby	Operating					
Equipment ID	Description			Hours	Hours					
00000002	Vibratory Hammer			0.0	10.0					
0000003	Arc Welder			0.0	8.0					
0000004	Crane - 100' Boom		Total	0.0	<u>10.0</u> 28.0					
Total operating hours to date	e: 28.0		TOLAI	0.0	26.0					
ACCIDENT REPORTING (Desc	ribe accidents)									
No accidents reported toda	v									
m	aterial used and work	tor, I certify that this Re performed during this I s, to the best of my kno	Reporting period a	re in complian						

Т	RANSMITTAL OF SHOP DRAWINGS, EQUIPM	MENT DATA, MA	ATERIAL SAMPLES, OR	DATE			TRANSMITTAL	NO.		
	MANUFACTURER'S CERTIFICA				06/06/200	2	02	2486-37.2		
	(Read instructions on the reverse side	e prior to initiating t	his form)							
	SECTION I - REQUEST F	OR APPROVAL	OF THE FOLLOWING ITEMS	(This se	ction will be in	nitiated by the o	contractor)			
	nd Haven Area Office		ompany, Inc	CONTRAC	T NO.		CHECK ONE:	IEVA TO A NOA	AITT A I	
	South Harbor Street . Box 629		agination Park Road	DACW	/35-02-C-###	# NA	THIS IS A N			
_	nd Haven, MI 49417	Fantasy	, MI 49494					TAI02486-37		
SPECIFIC	ATION SEC. NO. (Cover only one section with each	PROJECT TITLE A	ND LOCATION	· II				HIS TRANSMITTAL IS		
transmittal	, — 100			1			FOR X FIO			
ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)		MFG OR CONTR. CAT., CURVE	NO. OF COPIES		REFERENCE UMENT	FOR CONTRACTOR USE CODE	VARIATION (See Instruction	FOR CE USE	
			DRAWING OR BROCHURE NO.	COPIES	SPEC. PARA. NO.	DRAWING SHEET NO.	USE CODE	No. 6)	CODE	
a.	b.		(See instruction no. 8)	d.	e.	f.	g.	h.	i.	
12	Production Test Results		DATA	3	3.2.3.4				F	
<u> </u>										
DEMARKS					Loortify that	the above subm	itted items have I	noon rovious	-	
REMARKS					-		in the strict con			
					contract drav	wings and speci	fications except a	s otherwise		
					Stateu.					
		050	TION II ADDDOVAL ACTION			NAME AND SIG	NATURE OF CON	TRACTOR		
ENIO: 0.5:	DEC DETUDIED (C. C. C	SEC	TION II - APPROVAL ACTION	2001/11:0	T. 100/7 /		I DATE			
ENCLOSU	RES RETURNED (List by item No.)		NAME, TITLE AND SIGNATURE OF APP	YKOVING AL	THORITY		DATE			

ENG FORM 4025-R, MAR 95 (ER 415-1-10) EDITION OF SEP 93 IS OBSOLETE. SHEET 1 OF 1 (Proponent CEMP-CE)

CONTRACTOR

TITLE AND LOCATION

CONTRACT NO.

FY03 MAINTENANCE DREDGING, MONROE HARBOR, MICHIGAN CONTRACTOR: SCHEDULE DATES CONTRACTOR APPROVING AUTHORITY ACTION G 0 V T R С Т A N 0 A S A C T V R S M S C T C T T T A R A F DATE FWD TO APPR MAILED Ε Ε 0 0 TO С AUTH/ CONTR/ T Y Α G# R Α R Ε Т DATE RCD DATE FWD DATE RCD FROM TO OTHER FROM OTH DESCRIPTION APPROVAL MATERIAL DATE DATE DATE RCD Ε A P ٧ 0 NEEDED NEEDED OF FRM APPR Ν С 0 W D E D CONTR REVIEWER REVIEWER ACTION ITEM SUBMITTED SUBMIT BY ACTION AUTH REMARKS BY Ν (b) (f) (a) (e) (g) (h) (i) (j) (k) (l) (m) (n) (0) (p) (q) (r) 01100 SD-01 Preconstruction Submittals Accident Prevention Plan G AOF Payrolls and Basic Records G AOF SD-07 Certificates **Progress Chart** G AOF **Additional Property Agreements** G RED 01130 SD-01 Preconstruction Submittals **Environmental Protection Plan** G AOF SD-01 Preconstruction Submittals 01451 **Quality Control Plan** G AOF SD-01 Preconstruction Submittals 02482 Dredging, Conveyance and G AOF Disposal Plan SD-09 Manufacturer's Field Reports Sounding Records G AFO

TR	MA	F SHOP DRWINGS, EQ NUFACTURER'S CER (Read instructions on the reve	TIFICATES OF COM	IPLIANCE	ES, OR	DATE			TRANSMITTAL	NO.	
		SECTION I – REQUI			ING ITEMS (This	section will	he initiated by	v the contracto	r)		
TO:		FRO				CONTRA			CHECK ONE:		
SPECIFICATIO transmittal)	N SEC. NO (Cove	r only one section with each	PROJECT	TITLE AND LOCATI	ON						
ITEM NO.		DISCRIPTION OF ITE (Type size, model			MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8)	NO. OF COPIES		T REFERENCE UMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (see Instruction No. 6)	FOR CE USE CODE
a.		b.			c.	d.	e.	f.	g.	h.	i.
		0.									
REMARKS					1		in det	ail and are correct act drawings and	submitted items have et and in strict conform specifications except a	nance with the as otherwise stated.	
			QE/	CTION II – APPRO	VAL ACTION						
ENCLOSURES R	ETURNED (List by I	tem No.)	3.0		TLE, AND SIGNATUR	E OF APPI	ROVING AUT	ГНОКІТҮ	1	DATE	
ENG FORM 402:	5, MAY 91	(ER 415-1-10)	EDITION OF AU	G 89 IS OBSOLETE.		SHEET	OF	_	(Propon	ent: CEMP-CE)	

INSTRUCTIONS

- 1. Section I will be initiated by the Contractor in the required number of copies.
- 2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.
- 3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288 for each entry on this form.
- 4. Submittals requiring expeditious handling will be submitted on a separate form.
- 5. Separate transmittal form will be used for submittals under separate sections of the specifications.
- 6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specification -- also, a written statement to that effect shall be included in the space provided for "Remarks".
- 7. Form is self-transmittal, letter of transmittal is not required.
- 8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.
- 9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

A -- Approved as submitted. E -- Disapproved (see attached)

B -- Approved, except as noted on drawings. F -- Receipt acknowledged

C -- Approved, except as noted on drawings FX -- Receipt acknowledged, does not comply Refer to attached sheet resubmission required.

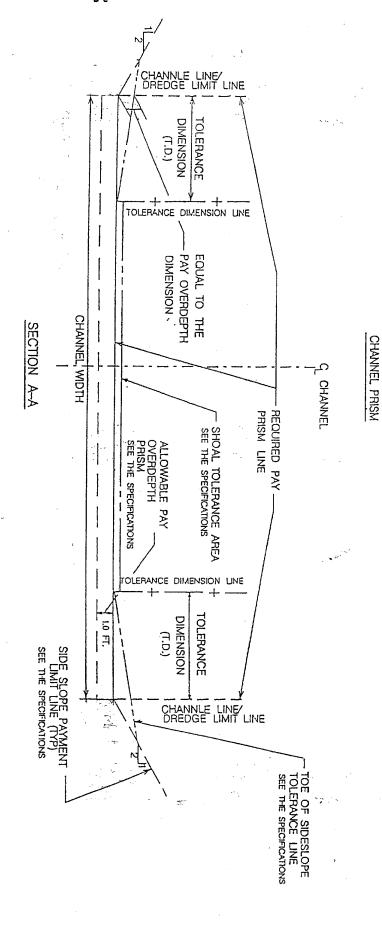
D -- Will be returned by separate correspondence. G -- Other (Specify)

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

* U.S. Government Printing Office: 1991

RE	PORT OF	OPER	ATION	S - PIPE	LINE, C	OIPP	ER C	R BU	CKET	DR	RED	GES	REF	PORTS CON ENGC			1BOL
THRU:				TO:						FRC	OM:		L	27400			RT NO.
CHARACTE	ΜΔ	INTE- r	NE'	\\\\ 	DAILY [DATE OR	PERIO	D	
R	□ NANCE □ W					S	TAT	JS	COM				NUAL				
	NAME AN	ID TYPI	E					SIZE		PIPE	ELINI		dia. disch.	DIPPER OR	BUCI	KET	cu. yds. o
DREDGE	HORSEF	POWER	OF_	DREDGE	PUMP	S	UCTI	ON PIF	PE JET		CU	TTER OR E	BUCKET	PROPULSION	NC		
		BER OF		DREDGE	SHORE	: O	THER	PLAN	ТТОТ	AL		WORK	SHIFT	l S PER DAY	Y DAYS PER WEEK		
	NAME	MEM <u>BE</u>	RS ▶					AUT	н	Ιv	VIDT	CHEDULE TH	DEPTH	<u> </u>	OVE	RDEF	PTH
PROJECT							D	IMENS									
AND BAR	LOCATIO	N (inclu	ıde stat	ion numb	ers)												
CHARACTE	ABSOULT	E DENS	SITY		IN PLA	ACE [DENS	ITY	GMS/	'I ita		VOIDS RA	TIO				
r of Material	GRAIN SIZ	ZE							GIVI3/	LITE		GEOLOGIC	AL CLAS	SSIFICATIO	V		
	NUMBER													TOTAL NO. O	F		
CONTRACT OR DREDGING ORDER		1_							CONTR				LABOR	WORK WAS I			
CHANNEL CONDITION	AVERAGE DEPTH	BEFOR	RE DREE	OGING A	TER DR	EDG	ING	SOUN	MUM IDING	BE	EFOR	re dredgi	NG	AFTER DR	EDGIN	IG	
RIVER STAGE	MINIMUM	1	TIME	I	MAXIN	MUM		TIME		1	(GAGE LOC	ATION				
WEATHER	(clear, cloudy	, rain, sno	ow, and fo	og)				1	VISIB			WIND (ma	ximum v	elocity & di	ocity & direction)		
CONDITION	WC	ORK PI	ERFOR	MED						mi	iles	DISTRIE	UTION	OF TIME			
	ITEM			UNIT	QUA	ANTI	TY					VE WORK		E	HOL	IRS	MIN.
AVERAGE WI	DTH OF CL	JT		FEET				(chargeable to cost of work) PUMPING OR DREDGING									
TOTAL ADVAI TOTAL ADV. I			S PERIC	FEET OD FEET							TIME Hrs.	M	lin				
TOTAL ADVA	NCE TO DA	ATE		FEET				NON-EFFECTIVE WORKING TIME					IME				
FLOATING PIF			E PIPE: PIPE	FEET FEET					(chargeable to cost of work) HANDLING PIPE LINES								
AVERAGE LIF	Т			FEET				HANDLING ANCHOR LINES									
AVERAGE PUI		MP. HR	GROS	R.P.M.				CLEARING PUMP AND PIPE LINE CLEARING CUTTER OR SUCTION HEAD									
SCOWS LOAD	DED		., citoo	NUMBER	_			WAITING FOR SCOWS									
AVERAGE LO			DS RF	CU. YDS MOVED				TO AND FROM WHARF OR ANCHORAGE CHANGING LOCATION OF PLANT ON JOB									
AMOUNT DRE	EDGED THI	S PERIO	DD:	IVIO VED				LOSS DUE TO OPPOSING NATURAL ELEMENTS									
	SS (comput DITED (pay		ount)					LOSS DUE TO PASSING VESSELS SHORE LINE AND SHORE WORK									
AMOUNT PRE		•	ΓED:					WAITING FOR BOOSTER									
	SS (comput		ount)					MINOR OPER. REPAIRS (explain in remarks)									
(2) CRED	ITED (pay		- DΔΤΕ:					WAITING FOR ATTENDANT PLANT PREPERATION AND MAKING UP TOW									
	SS (comput							TRANSFERRING PLANT BETWEEN WORKS									
(2) CRED	ITED (pay		ANT PL	ANT				LAY TIME OFF SHIFT AND SATURDAYS SUNDAYS AND HOLIDAYS									
ITEM			OR NU			HOU	JRS		DRILL		חוט	JLIDA I 3					
												(explain in					
												CTIVE WO					
						TOTAL EFFECTIVE AND NON-EFFECTIVE TIME											
								PCT.	OF T		AL TI	geable to cos ME IN PER OST TIM	RIOD 1E				
					-			NAVI	OB DE			ND ALTER					
									SATIO		NO P	NIND MLIE	<u>~~ 101/3</u>	ı			
									LISION			,					
NUMBER OF	BY DISTRICT	PERSON	NEL	BY DIV 8	OCE PER	SONNI	EL		AL LO			(explain in	remarks)	 		
INSPECTIONS								PERC	CENTA	GE (OF T	OTAL TIM	1E				
CONTRACT USE ONLY					NO	YES	TOTAL TIME IN PERIOD										

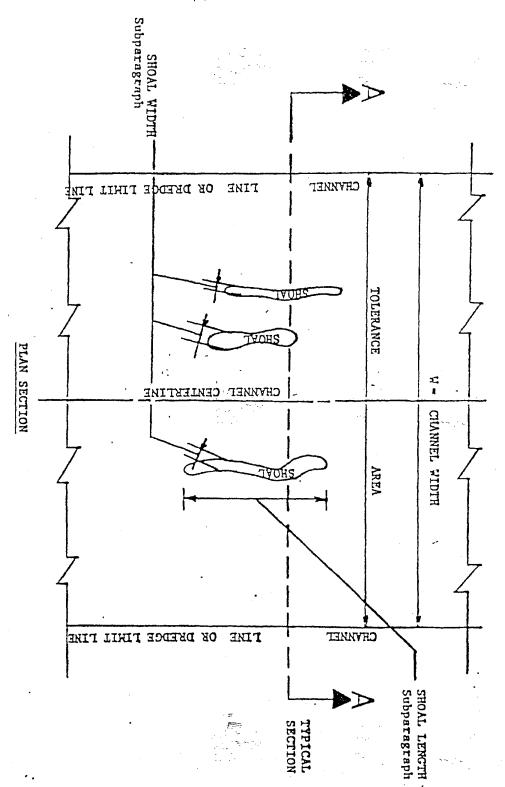
				S	UMMARY OF COSTS	
				IT	TEMS	COST
DIRECT PLAN	T OPERA	ATING COS	STS			
UNIFOR	M DAIL	/ RATE BA	SIS (To be	completed	when submitting Status and Completion reports.)	
CH		d to exclud		A <u>T</u> rement cost		
					submiting Annual report.)	
	BSISTEN	CE & QUA		PER DIEM	& MILEAGEPER BARREL	
WA	TER					
PLA	NO TA	NERSHIP (COSTS (as	computed b	elow)	
AT	TENDAN	IT PLANT.				
SUBTOT	ΓAL - UN	IIFORM DA	AILY RATE	OR ACTUA	L	
SHORE WORK	<u> </u>					
		ORE WORK	-			
OTHER COST						
SUBTOT						
COSTS. SUBTO	 F AL - 01	HER UNIT	COST		PER CUBIC YARD.	
GRAND TOTAL COSTS						
(OPERA	TING SUI	PPLIES		ANNUAL REPORT DATA (complete when submitting Annual report	·.)
COMMODITIES	CON	SUMED	INVE QUANTITY	NTORY VALUE	COST PER RENTAL MINUTE (Based on total operating cost)	per min.
FUEL (oil)	BBLS				TOTAL COST OF PLANT (End of F.Y. reporting period)	
LUBRICANT (oil)	GAL				BOOK VAULE (End of F.Y. reporting period)	
LUBRICANT (grease)	LBS				BALANCE IN PLANT ACCOUNT (End of F.Y. reporting period)	
WATER	GAL				PLANT OWNERSHIP COSTS (Actual for F.Y. reporting period):	
					DEPRECIATION REPAIRS (Adjusted)	
					CESSATION OF WORK	
SUBSISTENCE SUPPLIES					SMALL TOOLS, ETC.	
MISCELLANEOU SUPPLIES						
TOTAL					TOTAL	
REMARKS			•			
				T		
SUBMITTED BY	(Name,	title, and	signature)	RECOMMEI ture)	NDED BY (Name, title, and signa- APPROVED BY (Name, ti	tle, and signature)



NOTE: THE EXISTING CHANNEL

BOTTOM IS NOT SHOWN

SEE THE SPECIFICATIONS - SUBPARAGRAPH OVERDEPTH AND TOLERANCES SECTION 02482 DREDGING



See the Subparagraph "Overdepth and Tolerances" SECTION 02482 "DREDGING"

CHANNEL SHOAL TOLERANCE
Subparagraph

. 4.4.

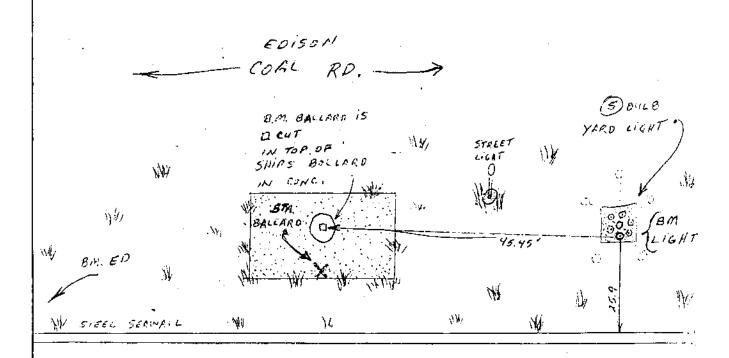
NINTH DISTRICT LOCAL NOTICE TO MARINERS GENERAL NOTICE ENTRY FORM

1. NAME OF COMPANY:	
2. TYPE OF OPERATION:	
3. LOCATION:	
4. COMMENCE DATE:	COMPLETE DATE:
5. HOURS OF OPERATION:	TO:
6. DAYS OF OPERATION:	TO:
7. NAME OF CONTACT VESSEL:	
8. VHF - FM CHANNELS MONITORED:	
9. SPECIAL REQUIREMENTS/REMARKS:	
10. FOR FURTHER INFORMATION CONTACT:_	
11. TELEPHONE #:	
12. SIGNATURE:	DATE:

"NOTE"

TEMPORARY MOORING BUOYS ARE REQUIRED TO BE WHITE WITH A BLUE HORIZONTAL BAND AROUND THE CIRCUMFERENCE OF THE BUOY AND THE WATER LINE. FOR MORE DETAILS CONCERNING REGULATIONS OF MOORING BUOYS REFER TO 33 CODE OF FEDERAL REGULATION PART 66.10-45. A COLOR DEPICTION OF A MOORING BUOY CAN BE FOUND I THE LIGHT LIST VOL. VII GREAT LAKES 1989 (PLATE 4).

HAME B.M. LIC	CHT	PROJECT & DAT	TE SET				
ÉAST X cour.	COUNTY	STATE	Q:				
NORTH Y COGR.	STAMPINGS	AGENCY	ALE				
TYPE X" CUT	CONDITIONS						
B.M. LIGHT IS AN X" CUT IN HORTH BOLT OF BASE OF 50'-60' TALL FIELD LIGHT AT WEST END OF EDISON CO.'S MOMRGE SHIP DOCK, S. SIDE OF RAISIN R.							
AT WEST END	OF EDISON CO.	S MONROE SHIP	1. T. Moure				
AT WEST END	OF EDISON CO.	R. MOMREE SHIP					
AT WEST END DOCK, 5.	OF EDISON CO.	S MONROE SHIP	NAME				
AT WEST END DOCK, 5.	OF EDISON CO.	R. MONIROE SHIP					
AT WEST END DOCK, S.	OF EDISON CO.	R. MONIROE SHIP					



	U.S.ARMY ENGINEER DISTRICT	R DISTRICT - DETROIT		
GENERAL INFORMATION	HORIZONAL	HORIZONAL ORIGIN	VERTICAL feet	meters
designation: PUMP reference no. project: MONROE HARBOR channel/reach: sheet no. 3 of 5	datum: NADB3 lat: 41°53′29.84404" N lon: 083°21′13.79321" W X: 13403655.063 E (US FOOT) Y: 144434 335 N N N S FOOT)	agency: C.O.E. order: date: method: set by: EXISTING	IGLD 1955: 0.000 IGLD 1985: 0.000 NAVD 1988: 0.000 NGVD 1929: 0.000	0.000
USGS Quad: STONY POINT, MICHIGAN NOAA chart	4085442.32423 E	POINT SOURCE:	pt. source: geoid. hgt: 0.000	0.000
county: MONROE state: MICHIGAN township/range TO7S, R09E section: N/A	state: MICHIGAN projection: LAMBERT CONIC zone: SOUTH code: 2113	MOST RECENT RECOVERY 11-09-1993	PROPERTY OWNER name: DETROIT EDISON telephone: access notes: car, boat,	
DESCRIPTION: STA. PUMP IS A 5/8" RE-BAR FLUSH WITH THE GROUND ON OF THE RAISIN RIVER ON THE DETROIT EDISON PROPERTY OF A CUT "X" ON EAST STEEL SEAWALL, 5.2'SE. OF CUT STEEL SEAWALL AND 36.5' NE. OF THE NE. CORNER OF A ON A LIGHT POLE.	FLUSH WITH THE GROUND ON THE SOUTH SIDE DETROIT EDISON PROPERTY, STA. IS 7.3' NW. SEAWALL, 5.2'SE. OF CUT "X" ON NORTH OF THE NE. CORNER OF A LIFE RING BOX	SKETCH		
		RAISIN	RIVER	
		STEEL	BRERKWILL 222 442	
		12 36. 5.2 32 4.		
REFERENCE #	SURVEY C	DESIGNA DATA	DESIGNATION: PUMP	

printed on JAN. 11, 1994

	U.S.ARMY ENGINEER DISTRICT	R DISTRICT - DETROIT			
GENERAL INFORMATION	HORIZONAL		VERTICAL feet		meters
designation: BOLLARD reference no. project: MONROE HARBOR channel/reach: sheet no. 2 of 5 USGS quad: STONY POINT, MICHIGAN NOAA chart community: MONROE county: MONROE state: MICHIGAN township/range TO7S, R09E section: N.A	datum: NADB3 lat: 41°53'34.76505" N lon: 083°20'30.81965" W X: 13402361.256 E (US FOOT) Y: 144918.739 N (US FOOT) X: 4085047.88089 E (METERS) Y: 44171.31987 N (METERS) State: MICHIGAN Projection: LAMBERT CONIC zone: SOUTH	agency: C.O.E. order: date: method: set by: EXISTING POINT SOURCE:	1GLD 1955: 1GLD 1985: 0.000 NAVD 1988: 0.000 NGVD 1929: 0.000 pt. source: geoid. hgt: 0.000 PROPERTY OWNER		00000
		1-04-1993	access notes: car, boat,	boat,	
	STA. BOLLARD IS A CUT "X" IN CONC. BASE OF BOLLARD ON THE SOUTH SIDE OF THE RAISIN RIVER ON THE DETROIT EDISON PROPERTY, 140+00 IS SCRIBED ON THE NORTH FACE OF THE BOLLARD, STA. IS 17.2' SOUTH OF INSIDE EDGE OF STEEL SEAWALL, 2.1' NORTH OF NORTH FACE OF BOLLARD, 52.5' WEST OF FIRE HYD. #18, AND 97.9' EAST OF THE CENTER OF THE WESTERN MOST BOLLARD.	RAISIN FLOW FLOW STEEL VEHICLE ACCESS WESTERM MOSTERM	WALL WALL CROSS CROSS CROSS ANDRAWT FIRE HYDRAWT ED)	= 97.9' 8= 17.2' \$= 52.5' \$- 2.1'	
REFERENCE #	SURVEY C	SURVEY CONTROL DATA	DESIGNATION: BOLLARD		

JAN. 11, 1994 printed on

		U.S.ARMY ENGINEER	DISTRICT - DETROIT				
GENERAL INFORMATION	HORIZONAL		HORIZONAL ORIGIN		VERTICAL	feet	meters
designation: POST reference no. project: MONROE HARBOR channel/reach: sheet no. 2 of 5 USGS Quad: STONY POINT, MICHIGAN NOAA chart community: MONROE state: MICHIGAN township/range TO7S, R09E section: N/A	datum: NADB3 lat: 41°53'53.78616" N lon: 083°21'00.47522" W X: 13400095.145 E (UU Y: 146816.905 N (UU X: 4084357.16880 E (I Y: 44749.88202 N (M State: MICHIGAN projection: LAMBERI COI zone: SOUTH	N W (US FOOT) (WETERS) (METERS)	agency: C.O.E. order: date: method: set by: EXISTING POINT SOURCE: MOST RECENT RECOVERY	e 100	IGLD 1955: 0.000 IGLD 1985: 0.000 NAVD 1988: 0.000 NGVD 1929: 0.000 pt. source: geoid. hgt: 0.000 PROPERTY OWNER name: FORD MOTOR CO. telephone: access notes: car, boat,	0.000 0.000 0.000 0.000 TOR CO.	00.000000000000000000000000000000000000
DESCRIPTION: STA. POST IS A CHISSELED "X" ON TOP OF BOLLARD LOCATED ON FORD MOTOR CO. PROPERTY ON THE NORTH SIDE OF THE RAISIN RIVER, 22.0' NW. OF THE EDGE OF RAISIN RIVER, 600' NW. OF 2 HIGH TENSION POWER LINES, 175' SOUTH OF SERVICE ROAD AND 20.1' WEST TO EAST LEG OF " WARNING HAZARDOUS AREA" SIGN.	" ON TOP OF BOLLARD LOCATIDE OF THE RAISIN RIVER, NW. OF 2 HIGH TENSION POO.1' WEST TO EAST LEG OF	TED ON FORD MOTOR 22.0' NW. OF THE OMER LINES, 175' " WARNING	SKETCH = 26.1 25 195 3 = 22.0 4 = 22.0	STANDER PROMI		The A ZEUSION UNES WAY	
REFERENCE #		SURVEY CO	SURVEY CONTROL DATA	DESIGNAT	DESIGNATION: POST		

printed on JAN. 11, 1994

office of record DETROIT DISTRICT

	U.S.ARMY ENGINEER DISTRICT	DISTRICT - DETROIT		
GENERAL INFORMATION	HORIZONAL	HORIZONAL ORIGIN	VERTICAL feet	meters
designation: HAZ reference no. project: MONROE HARBOR channel/reach: sheet no. 2 of 5 USGS Quad: STONY POINT, MICHIGAN NOAA chart county: MONROE state: MICHIGAN STA. HAZ IS A 5/8" X 4' RE-BAR SET 0. SIDE OF THE RAISIN RIVER, LOCATED ON 290'+- EAST OF 2 HIGH TENSION POWERLII 19.0' NORTH OF NORTH EDGE OF RAISIN R LEG OF "WARNING HAZARDOUS AREA": SIGN.	HAZ		9955: 9985: 9985: 9985: 9985: 9985: 9985: 9986:	0.000 0.000 0.000 0.000
		FLOW	RIVER	
REFERENCE #	SURVEY C	SURVEY CONTROL DATA	DESIGNATION: HAZ	

printed on JAN. 11, 1994

	U.S.ARMY ENGINEER DISTRICT	R DISTRICT - DETROIT			Prom
GENERAL INFORMATION	HORIZONAL	HORIZONAL ORIGIN	VERTICAL feet	Meters	
designation: CROSS reference no. project: MONROE HARBOR channel/reach: sheet no. 2 of 5 USGS Quad: STONY POINT, MICHIGAN NOAA chart community: MONROE	datum: NAD83 lat: 41°53'46.55951" N lon: 083°20'59.13224" W X: 13400205.542 E (US FOOT) Y: 146086.634 N (US FOOT) X: 4084390.81798 E (METERS) Y: 44527.29524 N (METERS)	agency: C.O.E. order: date: 11-09-1993 method: set by: GOSLING CZUBAK ASSOC. POINT SOURCE:	555: 0 885: 0 888: 0 29: 0 rce:	000000000000000000000000000000000000000	
state: MICHIGAN township/range T07S, R09E section: N/A	state: MICHIGAN projection: LAMBERT CONIC zone: SOUTH code: 2113	MOST RECENT RECOVERY 11-09-1993	name: DUNDEE CEMENT CO. telephone: access notes: car, boat,		
DESCRIPTION: STA. CROSS IS A 5/8"X 4' RE-B CEMENT CO. PROPERTY ON THE SO SOUTH OF THE TOP OF BANK FOR CORNER OF THE FRONT RANGE LIG AND 23.3' NW. OF A STEEL POST	STA. CROSS IS A 5/8"X 4' RE-BAR SET 0.10' ABOVE GROUND ON THE DUNDEE CEMENT CO. PROPERTY ON THE SOUTH SIDE OF THE RAISIN RIVER, 13.0' SOUTH OF THE TRO OF BANK FOR THE RAISIN RIVER, 43.1' SW. OF THE NW. CORNER OF THE FRONT RANGE LIGHT, 42.6' WEST OF A ELECTRIC METER POLE AND 23.3' NW. OF A STEEL POST.	FAISIN FLOW FLOW 1 = 13.0' 2 = 43.1' 3 = 42.6' 4 = 23.3'	RIVER PORT FRONT FRONT FRONT FRONT SELEC.		
REFERENCE #	SURVEY CO	DESIGNAT	DESIGNATION: CROSS		

printed on

JAN. 11, 1994

	U.S.ARMY ENGINEER DISTRICT	R DISTRICT - DETROIT		
GENERAL INFORMATION	HORIZONAL	HORIZONAL ORIGIN	VERTICAL feet	meters
designation: HARBOR LT. REFERANCE reference no. project: MONROE HARBOR channel/reach: sheet no. 1 of 5 USGS Quad: STONY POINT, MICHIGAN NOAA chart	datum: NAD83 lat: 41°53′59 .35008" N lon: 083°21′17.16758" W X: 13398826.030 E (US FOOT) Y: 147364.889 N (US FOOT) X: 4083970.34184 E (METERS) Y: 44916.90805 N (METERS)	agency: C.O.E. order: date: method: set by: EXISTING POINT SOURCE:	IGLD 1955: 0.000 IGLD 1985: 0.000 NAVD 1988: 0.000 NGVD 1929: 0.000 pt. source: geoid. hgt: 0.000	0.000
community: MONROE county: MONROE state: MICHIGAN township/range T07S, R09E section: N/A	<u> </u>	MOST RECENT RECOVERY 11-09-1993	PROPERTY OWNER name: DETROIT BULK MATERIALS telephone: access notes: car, boat,	ERIALS t,
DESCRIPTION: STA. HARBOR LT. REFERANCE IS A BRASS DISC IN CONC. NW. CORNER OF THE DETROIT BULK MATERIALS PROPERTY, TOP OF BANK OF THE RAISIN RIVER, 84.3' NW OF CENTE 27.1' NE OF CENTER OF BOLLARD, 65.2' SE OF FENCE P SE OF STA. ENVIORNMENT-2.	STA. HARBOR LT. REFERANCE IS A BRASS DISC IN CONC. LOCATED NEAR THE NW. CORNER OF THE DETROIT BULK MATERIALS PROPERTY, 1.5' SOUTH OF THE TOP OF BANK OF THE RAISIN RIVER, 84.3' NW OF CENTER OF BOLLARD, 65.2' SE OF FENCE POST, AND 66.72' SE OF STA. ENVIORNMENT-2.	RAISIN FLOW FLOW SETCH ROLLARIE SOLLARIE SOLUARIE SOLLARIE SOLLARIE SOLUARIE SOLUARI	RIVE R BANK BANK 1 = 65.1. 2 = 1.5 3 = 64.3 4 : 27.1	
REFERENCE #	SURVEY C	SURVEY CONTROL DATA	DESIGNATION: HARBOR LT. REFERANCE	ж.
office of record				
3		pataina	100 11 100/	

JAN. 11, 1994 printed on

	U.S.ARMY ENGINEER DISTRICT	DISTRICT - DETROIT			
GENERAL INFORMATION	HORIZONAL				
designation: ENVIORNMENT-2	datum: NAD83	agency: C.O.E.	VEKIICAL Teet	meters	
reterence no.	lat: 41°53′59.92172" N lon: 083°21′17.60562" W		IGLD 1955: 0.000	000*0	-
project: MUNKUE HARBOR channel/reach: sheet no. 1 of 5	X: 13398792.208 E (US FOOT)	method: set by: EXISTING	NAVD 1988: 0.000 NGVD 1929: 0.000	000.0	
USGS Quad: STONY POINT, MICHIGAN NOAA chart	4083960.03319 E	POINT SOURCE:	pt. source:	000	
	ate	e ins	2		T
state: MICHIGAN township/range T07S, R09E section: N/A	projection: LAMBERT CONIC zone: SOUTH code: 2113	MOST RECENT RECOVERY 12-14-1993	name: MONROE ENVIRONMENT CO. telephone: access notes: car, boat,	MENT CO. oat,	
DESCRIPTION: STA. ENVIORNMENT-2 IS A 5/8"X5' RE-ROD 0,10' ABOVE NEAR THE NE. CORNER OF THE MONROE ENVIRONMENT CORP. SOUTH SHORE OF THE RAISIN RIVER. IT IS LOCATED 5.93 CORNER OF A STEEL SEAMALL, 2.16' NW. OF THE OUTSIDE SEAWALL BY BROKEN FENCE POST, 2.18' SOUTH OF THE IN STEEL SEAWALL AT WELD SEAM, AND NW. 66.72' FROM STA REFERENCE.	STA. ENVIORNMENT-2 IS A 5/8"X5' RE-ROD 0,10' ABOVE THE GROUND LOCATED NEAR THE NE. CORNER OF THE MONROE ENVIRONMENT CORP. PROPERTY ON THE SOUTH SHORE OF THE RAISIN RIVER. IT IS LOCATED 5.93'SW. OF THE NE. CORNER OF A STEEL SEAWALL, 2.16' NW. OF THE OUTSIDE EDGE OF STEEL SEAWALL BY BROKEN FENCE POST, 2.18' SOUTH OF THE INSIDE EDGE OF A STEEL SEAWALL AT WELD SEAM, AND NW. 66.72' FROM STA. HARBOR LT. REFERENCE.	SKETCH FLOW STEEL SEAWALL STEEL SEAWALL O. WELD SEAM 22 5.95' 22 5.95' 32 2.16' 42 66.72' ALCORNAMENT-2	DUTSIDE EDGE BUTSIDE EDGE BY BROKEN FENCE POST	元 2 2 3 3 4 3 6 7 6 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
REFERENCE #	SURVEY CC) SURVEY CONTROL DATA	DESIGNATION: ENVIORNMENT-2		1

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	U.S.ARMY ENGINEER DISTRICT	R DISTRICT - DETROIT			
GENERAL INFORMATION	HORIZONAL	HORIZONAL ORIGIN	VERTICAL	feet	meters
designation: RYPAN reference no. project: MONROE HARBOR channel/reach: sheet no. 2 of 5 USGS Quad: STONY POINT, MICHIGAN NOAA chart community: MONROE	datum: NAD83 lat: 41°54′05.72200" N lon: 083°21′23.49900" W X: 13398339.494 E (US FOOT) Y: 148004.119 N (US FOOT) X: 4083822.04553 E (METERS) Y: 45111.74562 N (METERS)	agency: C.O.E. order: date: method: set by: EXISTING POINT SOURCE:		0.0000000000000000000000000000000000000	0.000 0.000 0.000 0.000
county: MONROE state: MICHIGAN township/range T07S, R09E section: N/A	state: MICHIGAN projection: LAMBERT CONIC zone: SOUTH code: 2113	MOST RECENT RECOVERY 11-09-1993	PROPERITY OWNER name: FORD MOTOR CO. telephone: access notes: car, boat,	OR CO. car, boat,	
DESCRIPTION: STA. RYPAN IS A BRASS DISC SE 11.3' NORTH OF THE TOP OF BAN A SPK IN A 24" WILLOW, 150.22 AND 191.1' SW. OF 7th FENCE F STATION 64+00 AND 65+00.	STA. RYPAN IS A BRASS DISC SET IN CONC. FLUSH WITH GROUND SURFACE. 11.3' NORTH OF THE TOP OF BANK OF THE RAISIN RIVER, 78.64 SW. OF A SPK IN A 24" WILLOW, 150.23' SW OF A PK NAIL IN A POWER POLE, AND 191.1' SW. OF 7th FENCE POST FROM RIVER ALSO BETWEEN C/S STATION 64+00 AND 65+00.	SKETCH RAISIN RAISIN	KEK. PR	The state of the s	- 11.3' 22 78.4' 32 150.23' 4- 191.1'
REFERENCE #	SURVEY CC	SURVEY CONTROL DATA	DESIGNATION: RYPAN		

office of record DETROIT DISTRICT

STATION RECOVERY

					7.
PROJECT	LAKE ERIE	COUNTY MONROE	STATE	MICHIGAN	
NAME	B.M. ED	STAMPINGS	AGENCY	U.S.C.E.	
PE	BRONZE DISK	CONDITION		,	,

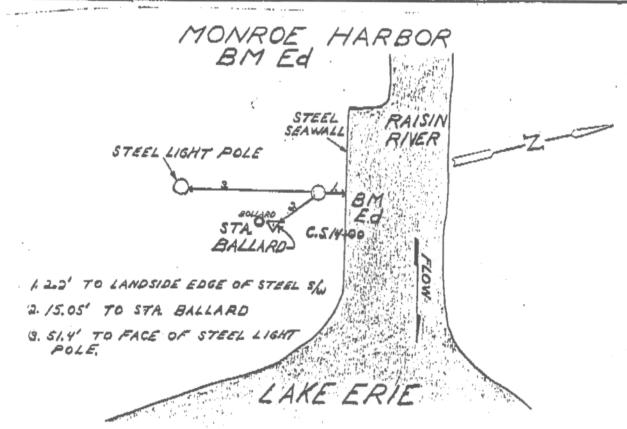
DESCRIPTION

B.M. "ED"

B.M. "ED" IS LOCATED IN MONROE COUNTY, MONROE MICHIGAN NEAR THE MOUTH OF THE RAISIN RIVER. IT IS AT C.S.14+30, BEING THE HIGHEST POINT OF A STANDARD BRONZE DISK 2.2' SOUTHWEST OF THE LANDSIDE EDGE OF A STEEL SEAWALL, 15.05' NORTHEAST OF STATION BALLARD & 51.4' EAST OF A STEEL LIGHT POLE.

DRAW SKETCH ON REVERSE SIDE

BY	HORIZONTAL DATA	VERTICAL DATA
DATE	EASTING	IGLD
OFFICE	NORTHING	USCAGS



MAYNE MAGRA MA	BM: BOLLARD			PROJECT #	DATE SET
Y COOR. Y COT CHISELED IN BOLLARD YPPE COMPATION Is located in Monroe County, Michigan near the northeast corner of the Raisin River turning basin, being 30.0' north of a cleat, i.6.8' southeast of a wrought from fenc8886d 3.5' west of a seawall, the highest point being a X cut chiseled in the top of the bollard. FLV. 577.6 IGLD & S. USC-65 SE 96 PS 96 RALSIN RIVER TURNING BAJIN GAGE BOARD TO GO Z. 16.8	EAST	COUNTY		STATE	
IS located in Monroe County, Michigan near the northeast corner of the Raisin River turning basin, being 30.0' north of a clear, 16.8' southeast of a wrought from fenceRaisin 3.5' west of a seasyll, the highest point being a X cut chiseled in the top of the bollard. LLV. S 7 7.6 IGLD 85 USC-65 A E 96 P6 P7 IZ DIST, To A P7 RAISIN RIVER TURNING BASIN CANONIE BARGES CLEAT 1.30.0 2.16.8	NORTH .	STAMPINGS		MICHIGAN AGENCY	
IS located in Monroe County, Michigan near the northeast corner of the Raisin River turning basin, being 30.0' north of a cleat, 16.8' southeast of a wrought from fenceRaid 3.5' west of a seawall, the highest point being a X cut chiseled in the rop of the bollard. FLV. 577.6 IGLD 85 USC-65 SE 96 96* PLV. 577.6 IGLD 85 USC-65 SE 96 96* RAISIN RIVER TURNING BASIN CANONIE CARGES CLEAT 1.30.0 2.16.8		X CUT CHISELED I		USCE	
is located in Monroe County, Michigan near the northeast corner of the Raisin River turning basin, being 30.0' north of a cleat, 16.8' southeast of a wrought from fenceRaid 3.5' west of a seawall, the highest point being a X cut chiseled in the top of the bollard. ELV. 577.6 IGLD 85 USC-GS % £ 95 # \$ No FLOW RAISIN RIVER TURNING BASIN CANONIE 646E Banker 194 CANONIE 646CES	**************************************		en kangaran da kalendaran da kangaran da kangaran da kangaran da kangaran da kangaran da kangaran da kangaran Tanggaran da kangaran da k	1	9
RAISIN RIVER TURNING BASIN CANONIE BARKES CLEAT 1. 30.0 2. 16.8	north of a fenc exand 3	cleat, 16.8' southeas 3.5' west of a seawall	t of a wrou	ght iron est point	
RAISIN RIVER TURNING BASIN CANONIE BARGES CLEAT 1. 30.0 2. 16.8					•
RAISIN RIVER TURNING BASIN CANONIE BARCES CLEAT 1. 30.0 2. 16.8					
RAISIN RIVER TURNING BASIN CANONIE BARKES CLEAT 1. 30.0 2. 16.8		IGLD 85	usc	-GS	ž.
TE DIST. TO A FLOW RAISIN RIVER TURNING BASIN CANONIE BARGES CLEAT 1. 30.0 2. 16.8				· - ·	¥
PLOW FLOW RAISIN RIVER TURNING BASIN CANONIE BARGES CLEAT 1. 30.0 2. 16.8					1
RAISIN RIVER TURNING BASIN CANONIE BARGES CLEAT 1.30.0 2.16.8	l _z	DIST.	76 2	1	110
RAISIN RIVER TURNING BASIN CANONIE BARGES CLEAT 1.30.0 2.16.8	Z				£ .
RAISIN RIVER TURNING BASIN CANONIE BARGES CLEAT 1. 30.0 2. 16.8		\	e generalise Para de la companya de Para de la companya d	<u>, , , , , , , , , , , , , , , , , , , </u>	
RAISIN RIVER TURNING BASIN CANONIE BARGES CLEAT 1. 30.0 2. 16.8		1	FLC)w	
RAISIN RIVER TURNING BASIN CANONIE BARGES CLEAT 1. 30.0 2. 16.8		i			•
RAISIN RIVER TURNING BASIN CANONIE BARGES CLEAT 1. 30.0 2. 16.8				•	
RAISIN RIVER TURNING BASIN CANONIE BARGES CLEAT 1. 30.0 2. 16.8					1
CANONIE BASIN CANONIE BARGES CLEAT 1. 30.0 2. 16.8					USKAUGHT
CANONIE BOARD TO SEALL SHALL BARGES CLEAT 1. 30.0 2. 16.8		RATSTN -RIVEF			WHENCE THE X
CANONIE WALL JEHR BARGES CLEAT 1. 30.0 2. 16.8		RAISIN RIVER TURNING BA	Z JIN		XXXX
BARGES CLEAT 1. 30.0 2. 16.8		RAISIN RIVEF TURNING BA	? }IN	GAGE BOARD S	XXXX
CLEAT 1. 30.0 2. 16.8		TURNING BAL	SIN		XXXX
2.16.8		TURNING BAL	SIN		XXXX
A = A + A + A + A + A + A + A + A + A +		TURNING BAL	SIN		EM EC
		TURNING BAL	SIN	WALL /	1. 30.0 F 2. 16.8 F

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General Decision Number IL020018

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General Decision Number IL020018
 Superseded General Decision No. IL010018
 State: Illinois
 Construction Type:
 DREDGING
 MARINE
 County(ies):
 STATEWIDE
 ILLINOIS, INDIANA, MICHIGAN, MINNESOTA, NEW YORK, OHIO,
 PENNSYLVANIA AND WISCONSIN
 DREDGING AND MARINE CONSTRUCTION
 Dredging and Marine Construction Projects: floating/land
 equipment engaged in clamshell, backhoe and dragline dredging,
 marine construction, bridges, salvage operations and cranes,
 loaders, dozers, or other equipment used for disposal of dredge
 spoils or marine construction materials on land at the slip or
 dock, at the project site, where the above material/spoils is
 being handled, and all equipment utilized on breakwall/breakwate
 structures on the Great Lakes, Islands therein, their connecting
 and tributary waters, including the Illinois Waterway to the Loc
 at Lockport, Illinois, the New York State Barge Canal System
 between Tonawanda, New York and Waterford, New York and Oswego,
 New York, the Duluth-Superior area to the Fond du Lac Bridge
 Crossing (Minnesota State Highway 23) on the St. Louis River and
 on the St. Lawrence River eastward to the International Boundary
 near St. Regis, New York.
 Modification Number
                         Publication Date
             0
                           03/01/2002
             1
                           01/10/2003
                           03/07/2003
COUNTY(ies):
STATEWIDE
 * SUIL2001A 01/01/2003
                                                      Fringes
                                     Rates
MECHANICAL DREDGING (CLAMSHELL, DRAGLINE, AND BACKHOE) AND
MARINE CONSTRUCTION):
FLOATING EQUIPMENT:
  Indiana:
Class I
                                   34.60
                                                   11.55+b&c
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Class II	33.10	11.55+b&c
Class III	29.45	11.55+b&c
Class IV	24.50	11.55+b&c
Illinois:		
Class I	38.35	11.55+b&c
Class II	36.85	11.55+b&c
Class III	32.80	11.55+b&c
Class IV	27.30	11.55+b+c
Michigan:	27.30	11.33.2.0
Class I	26.75	14.58+b&c
Class II	25.25	14.58+b&c
Class III	22.50	14.58+b&c
Class IV	18.70	14.58+b&c
Minnesota:	10.70	14.50+0&C
Class I	21 75	8.45+b&c
	31.75	
Class II	30.25	8.45+b&c
Class III	26.95	8.45+b&c
Class IV	22.40	8.45+b&c
New York:		
(Cattaraugus, Chautauga,		
Erie and Orleans Counties):		
Class I	26.96	13.56+b&c
Class II	25.46	13.56+b&c
Class III	22.66	13.56+b&c
Class IV	18.85	13.56+b&c
(Cayuga, Jefferson, Oswego,		
and St. Lawrence Counties):		
Class I	25.30	8.85+b&c
Class II	23.80	8.85+b&c
Class III	21.20	8.85+b&c
Class IV	17.65	8.85+b&c
(Niagara):		
Class I	24.90	11.90+b&c
Class II	23.40	11.90+b&c
Class III	20.80	11.90+b&c
Class IV	17.30	11.90+b&c
(Monroe and Wayne Counties		
and the City of Rochester):		
Class I	27.50	9.00+b&c
Class II	26.00	9.00+b&c
Class III	23.15	9.00+b&c
Class IV	19.25	9.00+b&c
Ohio:	17.23	J.001D&C
(Ashtabula, Cuyahoga, Erie,		
Lake, and Lorain Counties:	20 26	7 10.1-6-
Class I	32.36	7.10+b&c
Class II	30.86	7.10+b&c

Class III	27.47	7.10+b&c			
Class IV	22.84	7.10+b&c			
(Lucas, Henry, Ottawa,					
Wood and Sandusky					
Counties:					
Class I	30.65	7.10+b&c			
Class II	29.15	7.10+b&c			
Class III	25.95	7.10+b+c			
Class IV	21.58	7.10+b&c			
Pennsylvania:	21.00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
(Erie County):					
Class I	24.57	8.74+b&c			
Class II	23.07	8.74+b&c			
Class III	20.67	8.74+b&c			
Class IV	17.77	8.74+b&c			
Wisconsin:	17.77	0.711D&C			
Includes all marine/floating type	work on prodoc	ta in the			
Superior/Duluth Harbor, Lake Supe		ts in the			
Class I	31.65	12.30+b&c			
Class I	30.15	12.30+b&c			
Class III		12.30+b&c			
	26.85 22.35	12.30+b&c			
Class IV HYDRAULIC DREDGING:	22.33	12.30+D&C			
TUG OPERATOR - Vessel Over 800 H		,			
Power 26.49	7.61+	a+b			
LAUNCH OPERATOR - Vessel 800 Hor		. 1			
Power Or Less 25.15	7.61+				
TUG ENGINEER	26.49	7.61+a+b			
TUG WORKERS:					
Fireman, Lineman, Oiler,	,				
Deckhand, Tankerman. Scowman, (on	/or				
with tugboats, launches,					
or other self-propelled		'			
boats)	22.51	7.61+a+b			
DREDGE WORKERS:					
Lead Deckhand	29.68	7.61+a+b			
Fireman, Oiler, Deckhand, &					
Scowman (with dipper, hydraulic					
or other floating equipment engaged in					
hydraulic and dipper dredging operations)					
Pipeline men, (both afloat & ashore including					
loading, unloading, maintaining, and handling					
pipelines for hydraulic dredges and sandboats)					
Rangeman, Tankerman, Sweepman and	service				
Truck Driver	22.51	7.61+a+b			
PAID HOLIDAYS (WHERE APPLICABLE):					
A- NEW YEAR'S DAY, B- MEMORIAL DAY	, C- INDEPENDEN	CE DAY, D-LABOR			

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DAY, E- THANKSGIVING DAY, F- CHRISTMAS DAY, G- PRESIDENT'S
DAY, H- VETERAN'S DAY.
FOOTNOTES:
a. $30.10 per day per employee for mecical
```

- b. Eight paid holidays: A thru H
- c. Hazardous/Toxic Waste Material:

*Level A \$2.50 per hour

*Level B 2.00 per hour

*Level C 1.00 per hour

*Level D 0.50 per hour

Such wages shall be above the classifications of work listed under mechanical dredging and Marine construction of this general wage decision.

*Working with Hazardous Waste at this level as defined by the U. S. Environmental Protection Agency.

CLASSIFICATION DESCRIPTIONS

Class I - Master Mechanic - assist and direct Class II, Class III, and Class IV, diver/wet tender, engineer (hydraulic dredge)

Class II - Crane/Backhoe Operator and Mechanic/Welder, assistant engineer(hydraulic dredge), leverman (hydraulic dredge), diver/tender

Class III - Deck Equipment Operator (Machineryman) Maintenance of Crane (over 50 ton capacity) or Backhoe (115,000 pounds or more), ug/launch operator, Loader/dozer and like equipment on Barge, breakwater wall, slip/dock, Scow, Deck Machinery, etc.

Class IV - Deck Equipment Operator(Machineryman/Fireman) (Four equipment units or more) and Crane Maintenance 50 ton capacity and under or Backhoe weighing 115,000 pounds or less, assistant tug operator.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental. ______

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division

U. S. Department of Labor

200 Constitution Avenue, N. W.

Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator

U.S. Department of Labor

200 Constitution Avenue, N. W.

Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U. S. Department of Labor

200 Constitution Avenue, N. W.

Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION























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General Decision Number MI020062

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General Decision Number MI020062
 Superseded General Decision No. MI010062
 State: Michigan
 Construction Type:
 RESIDENTIAL
 County(ies):
 MACOMB
                    OAKLAND
 MONROE
                    WAYNE
 RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family
 homes and apartments up to and including 4 stories)
 Modification Number
                     Publication Date
                          03/01/2002
                         03/08/2002
                         03/15/2002
             3
                          08/30/2002
                         12/20/2002
            5
                          03/28/2003
                          04/04/2003
COUNTY(ies):
MACOMB
                  OAKLAND
MONROE
                   WAYNE
ASBE0025D 06/01/2002
                                                     Fringes
                                     Rates
MACOMB, OAKLAND AND WAYNE COUNTIES:
INSULATOR/ASBESTOS WORKER
Includes the application of all
 insulating materials, protective
 coverings, coatings, and finishings
 to all types of mechanical systems 26.52
                                                    14.33
FOOTNOTE:
  Work requiring a spray coating in the application: Five percent
(5%) per hour additional.
 ASBE0045D 07/01/2001
                                     Rates
                                                     Fringes
MONROE COUNTY:
INSULATOR/ASBESTOS WORKER
 Includes the application of all
  insulating materials, protective
```

coverings, coatings, and finishi to all types of mechanical syste		11.21
BRMI0001A 06/01/2002	Rates	Fringes
BRICKLAYER	23.45	4.36
FOOTNOTES:	23.43	4.30
Using acid material in laying br	ricks: \$2.00 pe	er hour
additional.	,	
Working on two point swing stage	e: \$2.00 per h	our additional.
Sandblasting: \$2.00 per hour add		
Laying carbon material: \$2.00 pe		onal.
Gunite work: \$2.00 per hour addi		
Hot work: \$3.00 per hour addition	onal.	
BRMI0001D 06/01/2002		
	Rates	Fringes
MONROE COUNTY:		
CEMENT MASONS:		
Cement mason	28.48	8.49
Grinding and chipping		
hammers on walls and	00 71	0
ceilings Swing stage 15' above or	28.71	8.52
below grade	28.82	8.54
BRMI0009V 06/01/1998		
MONDOR COUNTRY (see at a f Dans and 11)		Fringes
MONROE COUNTY (west of Rawsonville Washtenaw and Wayne county line):	e Ra. or a con	cinuation of the
MARBLE, TERRAZZO AND TILE SETTER	19.70	6.87
TILE FINISHER	17.70	6.87
FOOTNOTE:	17.70	0.07
Sand blasting, an additional 25	cents per hou	r.
Two point swing stage, an additi		
BRMI0032C 06/01/2002		
2111120020 00, 01, 2002	Rates	Fringes
MACOMB COUNTY; MONROE COUNTY (east		
continuation of the Washtenaw and	Wayne County	line); OAKLAND ANI
WAYNE COUNTIES:		
MARBLE MASON	25.06	11.27
TERRAZZO WORKER	24.59	11.27
TILE SETTER	24.49	11.27
MARBLE FINISHER	19.87	11.62
TERRAZZO FINISHER	20.27	11.62
TILE FINISHER	19.89	11.62

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FOOTNOTES:

Work on scaffolding over 15 ft.: \$1.25 per hour additional. Swing stage work: \$1.50 per hour additional.

Terrazzo grinding: \$0.50 per hour above the terrazzo finisher rate.

Terrazzo work grinding vertical work and stairs: \$1.50 per hour above the terrazzo finisher rate.

CARP1045D 06/01/2001

CARFI043D 00/01/2001		
	Rates	Fringes
LATHER	24.907	36.08% + 3.81
CARP1045H 06/01/2001	Datas	T
	Rates	Fringes
SOFT FLOOR LAYER	23.38	10.29
CARP1234A 08/01/2001		
CARP1234A 00/01/2001	.	- ·
	Rates	Fringes
CARPENTER:		
Single-family homes and detached		
condominiums	21.12	6.17
Multi-family - condominiums	23.655	6.495
ELEC0008H 06/01/2001		
20000001 00,01,2001	Rates	Fringes
MONROE COUNTY:		5

ELECTRICIAN

28.98 4.5% + 8.00

FOOTNOTES:

When a worker is required to make up cables, pot heads, or splices on lead cable: 5% per hour additional.

Work where respiratory conditions exist and protective equipment is used: 5% per hour additional.

Work on structures outside of buildings such as water towers, smoke stacks, radio and television towers, more than 75 ft. above the ground; also similar structrues 30 ft. above the roofs of buildings on which the work is being performed; also, work in caissons and tunnels more than 30 ft. in depth and in tunnels under air pressure: 5% per hour additional.

Work performed 40 ft. above any floor or pit floor (except work performed in a "bucket truck" or from a properly erected State approved scaffold) or any height above any hazardous location, such as acid pits, machinery, etc.: 5% per hour additional.

Work welding or torch cutting any metal or rod that gives off toxic fumes for a period of one hour or more (short periods of time to be accumulative in the course of the day): 5% per hour additional.

Compounding of special skills and/or hazardous pay shall not

exceed a total of 10%.

ELEC0058D 06/01/2002

Rates Fringes

MACOMB, OAKLAND AND WAYNE COUNTIES:

ELECTRICIANS:

Work on sound and communications/limited-energy

systems (including

inter-communication public

address, paging, music,

security systems, nurse call

systems, telecommunications

(voice and data), fiber optic

cabling systems, sound systems,

broadband systems, computer

network systems, CCTV systems,

fire detection/signaling

 $\ensuremath{\mathsf{systems}}\xspace,$ and temperature control

systems) 25.97 3% + 4.77

All other work on single family homes and apartments up to and including 3 stories 19.20 3% + 8.11

All other work on 4-story

apartment buildings 33.15 3% + 10.58

FOOTNOTES:

All other work on 4-story apartment buildings:

Work on a suspended swinging scaffold, bosun chair or swinging crane inside or outside of buildings at elevations in excess of 60 ft. above the surface immediately below (does not iclude work performed from catwalks with guardrails on swinging cranes): 15% per hour additional.

Work requiring the use of gas masks (does not apply to the use of dust respirators): 15% additional.

ELEV0036A 07/02/2002

Rates Fringes

MACOMB, OAKLAND AND WAYNE COUNTIES:

ELEVATOR MECHANIC 30.965 7.455

FOOTNOTE:

Vacation Pay: 8% with 5 or more years of service, 6% for 6 months to 5 years service. Paid Holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Friday after, and Christmas Day.

ELEV0044D 08/01/2000

Rates Fringes

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MONROE COUNTY:

ELEVATOR MECHANIC 28.385 7.195

FOOTNOTE:

Vacation Pay: 8% with 5 or more years of service, 6% for 6 months to 5 years service. Paid Holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Friday after, and Christmas Day.

ENGI0324Z 06/01/2002

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
GROUP 1	34.06	11.65
GROUP 2	32.56	11.65
GROUP 3	31.06	11.65
GROUP 4	30.76	11.65
GROUP 5	29.94	11.65
GROUP 6	29.08	11.65
GROUP 7	28.11	11.65
GROUP 8	26.40	11.65
GROUP 9	19.69	11.65
GROUP 10	18.66	11.65

Tower cranes: to be paid the crane operator rate determined by the combined length of the mast and the boom. If the worker must climb 50 ft. or more to the work station, \$.25 per hour additional.

Derrick and cranes where the operator must climb 50 ft. or more to the work station, \$.25 per hour additional to the applicable crane operator rate.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Crane with boom and jib or leads 400' or longer

GROUP 2: Crane with boom and jib or leads 300' or longer

GROUP 3: Crane with boom and jib or leads 220' or longer

GROUP 4: Crane with boom and jib or leads 140' or longer

GROUP 5: Crane with boom and jib or leads 120' or longer

GROUP 6: Regular crane operator, job mechanic, and concrete

pump with boom operator

GROUP 7: Regular engineer

GROUP 8: Engineer when operating forklift, lull, extend-a-boom

forklift

FOOTNOTES:

GROUP 9: Engineer when operating compressor or welding machine

GROUP 10: Fire tender or oiler

ENGI03250 10/01/2001

Rates Fringes

POWER EQUIPMENT OPERATORS:

HAZARDOUS WASTE REMOVAL:

LEVEL A:		
GROUP 1	28.28	11.15
GROUP 2	24.75	11.15
Engineer when operating crane		
with boom and jib or leads		
220' or longer	31.23	11.15
Engineer when operating crane	31.23	11.13
with boom and jib or leads		
140' or longer	30.93	11.15
Regular crane operator, mechanic		11.15
dragline operator, boom truck	,	
operator and concrete pump		
	29.25	11.15
with boom operator	29.25	11.15
LEVELS B AND C:	07 22	11 15
GROUP 1	27.33	11.15
GROUP 2	23.80	11.15
Engineer when operating crane		
with boom and jib or leads		
220' or longer	30.28	11.15
Engineer when operating crane		
with boom and jib or leads		
140' or longer	29.98	11.15
Regular crane operator, mechanic	,	
dragline operator, boom truck		
operator and concrete pump with		
boom operator	28.30	11.15
LEVEL D:		
GROUP 1	26.03	11.15
GROUP 2	22.50	11.15
Engineer when operating crane		
with boom and jib or leads		
220' or longer	28.98	11.15
Engineer when operating crane		
with boom and jib or leads		
140' or longer	28.68	11.15
Regular crane operator, mechanic		
dragline operator, boom truck	,	
operator and concrete pump with		
boom operator	27.00	11.15
LEVEL D WHEN CAPPING LANDFILL:	27.00	11.13
GROUP 1	25.78	11.15
GROUP 2	22.25	11.15
Engineer when operating crane	22.25	11.15
with boom and jib or leads		
_	20 72	11 15
220' or longer	28.73	11.15
Engineer when operating crane		
with boom and jib or leads		

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140' or longer 28.43 11.15

Regular crane operator, mechanic,
dragline operator, boom truck
operator and concrete pump with
boom 26.76 11.15

HAZARDOUS WASTE REMOVAL CLASSIFICATIONS

GROUP 1: Backhoe, batch plant operator, clamshell, concrete breaker when attached to hoe, concrete cleaning decontamination machine operator, concrete pump, concrete paver, crusher, dozer, elevating grader, endloader, farm tractor (90 h.p. and higher), gradall, grader, heavy equipment robotics operator, loader, pug mill, pumpcrete machines, pump trucks, roller, scraper (self-propelled or tractor drawn), side boom tractor, slip form paver, slop paver, trencher, ultra high pressure waterjet cutting tool system operator, vactors, vacuum blasting machine operator, vertical lifting hoist, vibrating compaction equipment (self-propelled), and well drilling rig

GROUP 2: Air compressor, concrete breaker when not attached to hoe, elevator, end dumps, equipment decontamination operator, farm tractor (less than 90 h.p.), forklift, generator, heater, mulcher, pigs (portable reagent storage tanks), power screens, pumps (water), stationary compressed air plant, sweeper, and welding machine

ENGI0326Q 09/01/2002

	Rates	Fringes
POWER EQUIPMENT OPERATORS:		
UNDERGROUND CONSTRUCTION:		
GROUP 1	26.73	11.65
GROUP 2	23.00	11.65
GROUP 3	22.27	11.65
GROUP 4	21.70	11.65

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backfiller tamper; Backhoe; Batch plant operator (concrete); Clamshell; Concrete paver (2 drums or larger); Conveyor loader (Euclid type); Crane (crawler, truck type or pile driving); Dozer; Dragline; Elevating grader; Endloader; Gradall (and similar type machine); Grader; Mechanic; Power shovel; Roller (asphalt); Scraper (self-propelled or tractor drawn); Side boom tractor (type D-4 or equivalent and larger); Slip form paver; Slope paver; Trencher (over 8 ft. digging capacity); Well drilling rig; Concrete pump with boom operator

GROUP 2: Boom truck (power swing type boom); Crusher; Hoist; Pump (1 or more - 6-in. discharge or larger - gas or diesel-powered or powered by generator of 300 amperes or more - inclusive of generator); Side boom tractor (smaller than type D-4

or equivalent); Sweeper (Wayne type and similar equipment); Tractor (pneu-tired, other than backhoe or front end loader); Trencher (8-ft. digging capacity and smaller) GROUP 3: Air compressors (600 cfm or larger); Air compressors (2 or more - less than 600 cfm); Boom truck (non-swinging, nonpowered type boom); Concrete breaker (self-propelled or truck mounted - includes compressor); Concrete paver (1 drum - 1/2 yd. or larger); Elevator (other than passenger); Maintenance person; Pump (2 or more - 4-in. up to 6-in. discharge - gas or diesel powered - excluding submersible pumps); Pumpcrete machine (and similar equipment); Wagon drill (multiple); Welding machine or generator (2 or more - 300 amp.or larger - gas or diesel powered) GROUP 4: Boiler; Concrete saw (40 hp or over); Curing machine (self-propelled); Farm tractor (with attachment); Finishing machine (concrete); Fire person; Hydraulic pipe pushing machine; Mulching equipment; Oiler; Pumps (2 or more up to 4-in. discharge, if used 3 hours or more a day, gas or diesel powered excluding submersible pumps); Roller (other than asphalt); Stump remover; Trencher (service); Vibrating compaction equipment, self-propelled (6 ft. wide or over); End dump operator IRON0025T 06/01/2001 Rates Fringes MACOMB, OAKLAND AND WAYNE COUNTIES: IRONWORKERS: Ornamental, structural, 25.09 17.48 precast erector 18.37 12.88 20.56 15.41 Fence erector Siding & decking IRON0025U 04/01/2001 Rates Fringes MACOMB, OAKLAND AND WAYNE COUNTIES: IRONWORKER - PRE-ENGINEERED METAL BUILDING ERECTOR 19.50 13.04 IRON0026J 06/01/2001 Rates Fringes MACOMB, OAKLAND AND WAYNE COUNTIES: IRONWORKERS: Machinery mover, rigger and 22.11 15.48 machinery erector IRON0026Q 06/01/2001 Rates Fringes MACOMB, OAKLAND AND WAYNE COUNTIES:

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IRONWORKERS: Reinforcing Wire mesh	23.50 19.87	15.51 14.24
IRON0055F 07/01/2002		
MONROE COUNTY: IRONWORKER:	Rates	Fringes
Pre-engineered metal buildings; flat road mesh Fences & guardrails All other residential work	19.43 18.43 24.15	12.41 12.02 12.41
LAB00005K 10/01/2001		
I ADADEDC.	Rates	Fringes
LABORERS: HAZARDOUS WASTE ABATEMENT: MACOMB AND WAYNE COUNTIES: Work performed inside the build: and up to and including 5 ft. outside the building: Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D Levels A, B or C Work performed over 5 ft. outside the building: Work performed in conjunction with site preparation not requiring the use of personal protective	ing 22.05 23.05	8.16 8.16
equipment; Also, Level D	20.60	7.26
Levels A, B or C OAKLAND COUNTY: Work performed in conjunction with site preparation not requiring the use of personal protective	21.60	7.26
equipment; Also, Level D	22.05	8.16
Levels A, B or C MONROE COUNTY: Work performed inside the build: and up to and including 5 ft. outside the building: Work performed in conjunction	23.05 ing	8.16

with site preparation not requiring the use of personal protective equipment; Also, Level D Levels A, B or C Work performed over 5 ft. outside the building: Work performed in conjunction with site preparation not requiring the use of personal protective equipment; Also, Level D Levels A, B or C	22.85 23.85 20.30 21.30	7.10 7.10 5.26 5.26
LABO0259W 08/01/2002		
ASBESTOS LABORERS	Rates	Fringes
Includes removing and disposing of all insulation materials from walls, ceilings, floors, columns and all other non-mechanical surfaces; and removal of insulating materials from mechanical systems that are to be demolished; loading/unloading of bagged and tagged materials at the disposal site (includes lead paint abatement clean-up) (For Macomb and Wayne Counties, work outside of buildings only)	,	6.65
LABO0334T 07/01/2001	Data	Position and the
LANDSCAPE LABORERS:	Rates	Fringes
GROUP 1	15.63	3.25
GROUP 2	11.91	3.25
LANDSCAPE LABORER CLASSIFICATE GROUP 1: Landscape specialist, in equipment operator and lawn sprinks GROUP 2: Landscape laborer: small	ncluding air, ga ler installer	
mover and truck driver		
LABO0334U 06/01/2002	Datos	Eringes
MACOMB AND WAYNE COUNTIES:	Rates	Fringes
LABORERS:		
GROUP 1	22.80	8.71

GROUP	2	23.06	8.71
GROUP	3	23.55	8.71
GROUP	4	17.35	8.71
GROUP	5	23.30	8.71
GROUP	6	24.05	8.71

LABORER CLASSIFICATIONS

GROUP 1: Construction laborer, mason tender, carpenter tender, drywall handler, cement finisher tender and concrete chute and concrete bucket handler

GROUP 2: Signal person (on sewer and caisson work); air, electric or gasoline tool operator (including concrete vibrator operator, acetylene torch and air hammer operator), scaffold builder, caisson worker

GROUP 3: Lansing burner, blaster and powder person; air, electric or gasoline tool operator (blast furnace work or battery work)

GROUP 4: Cleaner/sweeper laborer

GROUP 5: Burning bar and oxy-acetylene gun

GROUP 6: Expediter person, top person and/or bottom person (blast furnace or battery work)

LABO0335F 09/01/2001

Rates Fringes

LABORERS:

OPEN CUT:

SCOPE OF WORK:

Open cut construction work shall be construed to mean work which requires the excavation of earth such as residential building site excavation and preparation, land balancing, demolition and removal of concrete and underground appurtenances, grading, paving, sewers, utilities and improvements; retention, oxidation, flocculation and irrigation facilities, and also including but not limited to underground piping, conduits, steel sheeting for underground construction, and all work incidental thereto, and general excavation.

MACOMB, OAKLAND AND WAYNE COUNTIES:

GROUP 1	20.00	7.47
GROUP 2	20.11	7.47
GROUP 3	20.16	7.47
GROUP 4	20.24	7.47
GROUP 5	20.30	7.47
GROUP 6	17.75	7.47
GROUP 7	14.37	7.47
MONROE COUNTY:		
GROUP 1	19.85	5.32
GROUP 2	19.96	5.32
GROUP 3	20.08	5.32

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GROUP 4	20.15	5.32
GROUP 5	20.30	5.32
GROUP 6	17.60	5.32
GROUP 7	14.24	5.32

OPEN CUT LABORER CLASSIFICATIONS

GROUP 1: Construction laborer

GROUP 2: Mortar and material mixer, concrete form person, signal person, well point person, manhole, headwall and catch basin builder, guard rail builder, headwall, seawall, breakwall, dock builder and fence erector

GROUP 3: Air, gasoline and electric tool operator, vibrator operator, driller, pump person, tar kettle operator, bracer, rodder, reinforced steel or mesh person (e.g., wire mesh, steel mats, dowel bars, etc.), welder, pipe jacking and boring person, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger person and directional boring person

GROUP 4: Trench or excavating grade person

GROUP 5: Pipe layer (including crock, metal pipe, multi-plate or other conduits)

GROUP 6: Grouting person, audio-visual television operations and all other operations in connection with closed circuit television inspection, pipe cleaning and pipe relining work GROUP 7: Restoration laborer, seeding, sodding, planting, cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips, planter boxes, flagstones, etc.

LABO0465C 06/01/2002

	Rates	Fringes
MONROE COUNTY:		
LABORERS:		
GROUP 1	23.76	7.49
GROUP 2	23.96	7.49
GROUP 3	24.26	7.49
GROUP 4	18.10	7.49

LABORER CLASSIFICATIONS

GROUP 1: Laborer, concrete chute and bucket handler

GROUP 2: Mortar mixer, including concrete and mortar 1-2 cu. yd. or smaller machine, or by hand in a mortar box; mason tender, plaster tender, portable mixer operator, air, diesel, electric, gasoline tool operator (including concrete vibrator operator and acetylene torch), caisson worker, signal person on concrete pours only

GROUP 3: Hazardous work: employees required to wear acid resistant clothing, heat resistant clothing or radiation protective clothing

GROUP 4: Cleaner, sweeper
FOOTNOTES:

On steeples, towers, silos, stacks and spires, the base wage for work performed shall be fifty cents (\$0.50) over the construction laborer rate, or applicable rate. The fifty cents per hour differential shall start at the ground level.

Scuba-diving: One hundred dollars (\$100.00) per day plus twenty dollars (\$20.00) for maintenance of individuals personal diving equipment.

Dynamite and blasters: One dollar (\$1.00) per hour over construction laborer rate.

LAB01076B 06/01/2002

	Rates	Fringes
OAKLAND COUNTY:		
LABORERS:		
GROUP 1	22.80	8.71
GROUP 2	23.06	8.71
GROUP 3	23.55	8.71
GROUP 4	23.30	8.71
GROUP 5	17.35	8.71

LABORER CLASSIFICATIONS

GROUP 1: Construction laborer, mason tender, carpenter tender, drywall handler, concrete chute and concrete bucket handler, and cement finisher tender

GROUP 2: Signal person (on sewer and caisson work); air, electric or gasoline tool operator (including concrete vibrator operator, acetylene torch and air hammer operator); scaffold builder; caisson worker

GROUP 3: Lansing burner, blaster and powder person

GROUP 4: Burning bar and oxy-acetylene gun, expediter person,

top and/or bottom person (blast furnace work)

GROUP 5: Cleaner/sweeper laborer

PAIN0022D 06/01/2001

Rates Fringes

DRYWALL FINISHER (in Monroe County,
does not include Level 5 work
(covering the whole board)):

Work on single family homes and
apartments up to and including
3 stories (does not include
high-rise apartments,
condominiums, hotels,
motels, convalescent homes,
medical centers and other

such commercial businesses) 19.35 9.67

All other residential work 22.73 9.70 PAINTER: Work on single family homes and apartments up to and including 3 stories (does not include high-rise apartments, condominiums, hotels, motels, convalescent homes, medical care centers and other such commercial businesses) 18.15 9.72 All other residential work 22.39 9.75 FOOTNOTES: Drywall finisher: Work spraying texture: \$0.50 per hour additional.

For all spray work and drywall finishers rigging for spray work, also blowing off (applies only to workers doing rigging for spray work on off-the-floor work; does not include setting up or moving rigging on floor surfaces, nor does it apply to workers engaged in covering up or tending spray equipment): \$0.80 per hour additional.

For all sandblasting and spray work performed on highway bridges, overpasses, tanks or steel: \$0.80 per hour additional. For all brushing, cleaning and other preparatory work (other than spraying or steeplejack work) at scaffold heights of fifty (50) feet from the ground or higher: \$0.50 per hour additional. For all preparatorial work on painting performed on open steel under forty (40) feet when no scaffolding is involved: \$0.50 per hour additional.

For all swing stage work - window jacks and window belts - exterior and interior: \$0.50 per hour additional.

For all spray work and sandblaster work to a scaffold height of forty (40) feet above ground level: \$0.80 per hour additional. For all preparatorial work and painting on all highway bridges or overpasses up to forty (40) feet in height: \$0.50 per hour additional.

For all steeplejack work performed where the elevation is forty (40) feet or more: \$1.25 per hour addtional.

PAIN0357D 06/01/2002

Painter:

Rates Fringes
GLAZIER 25.50 9.65

PAID HOLIDAYS: New Year's Day, Decoration Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day; provided that the employee has worked the last full regular scheduled work day prior to the holiday, and the first full regular scheduled work day following the holiday, provided the employee is physically

ahle	tο	work.
abic		MOTIV.

able to work.		
PLAS0067B 06/01/2001		
MACOMB, OAKLAND AND WAYNE COUNTIES:	Rates	Fringes
PLASTERER	27.54	8.03
PLAS0886H 07/01/2001	Dahar	D., i., ., .
MONROE COUNTY:	Rates	Fringes
CEMENT MASON FOOTNOTES:	23.53	9.27
Work on all swing stages, undergroupes of grinders used on concrete of additional.		
Continuous pour (work on all field of slip method of hollow concrete column and bins, and multiple-celled silos storage): \$2.00 per hour additional.	nns such as chimr as used in cemer	neys, silos
PLAS0886I 07/01/2001		
WOND OF GOVERNMENT	Rates	Fringes
MONROE COUNTY: DRYWALL TAPER (Level 5 work only - covers the whole board)	21.90	8.22
PLASTERER FOOTNOTES:	23.26	8.22
Work on swing stage: \$0.25 per hou Nozzle operator or operator of the \$0.75 per hour additional.		vning gun:
PLUM0098D 06/01/2000		
MACOMB, OAKLAND AND WAYNE COUNTIES: PLUMBER:	Rates	Fringes
Work on single family homes and apartments up to and including		
3 stories 2 Work on 4-story apartment building	22.20 gs 26.83	8.85
PLUM0636F 06/01/2002		
MACOMB, OAKLAND AND WAYNE COUNTIES:	Rates	Fringes
PIPEFITTER	32.01	13.10
PLUM0671B 07/01/2002	Dahan	Position of
	Rates	Fringes

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MONROE COUNTY:

PLUMBER & PIPEFITTER:

Work on single family homes and multiple dwellings up to 8 individual units per complex, including

townhouses, condos and

apartments 21.77 8.92
All other residential work 27.84 11.37

FOOTNOTES:

Work performed on scaffolds, ladders, picks, staging and structural steel 40 ft. above any floor or pit floor or any height above any hazardous locations such as acid pits, moving machinery, etc.: 10% per hour additional. The 40 ft. shall be determined by the height of the work and not where an employee stands.

Respiratory conditions and poor air quality: Where this condition is found to exist: 10% per hour additional.

ROOF0134F	07/01/2001

MONROE COUNTY:	Rates	Fringes
ROOFER	22.60	8.08
ROOF0149J 06/01/2001 MACOMB, OAKLAND AND WAYNE COUNTIES:	Rates	Fringes
ROOFERS: Roofer Slater	24.46 25.61	12.65 12.65

* SFMI0669G 04/01/2003

	Rates	Fringes
MONROE COUNTY:		
SPRINKLER FITTER (FIRE)	31.11	8.10
GENT 0.70 A.D 0.0 / 0.1 / 0.0.0.2		
SFMI0704B 08/01/2002		

MACOMB,	OAKLAND	AND	WAYNE	COUNTIES:		
SPRINKLE	ER FITTER	R (f:	ire)		33.48	11.94

SHEE0033V 07/01/2001

Rates Fringes

Rates

MONROE COUNTY:

SHEET METAL WORKER:

Work on any single family dwelling or multiple family

Fringes

housing unit where each individual family unit is conditioned by a separate and independent unit or system All other residential work 26.73 10.47

13.48 5.23

FOOTNOTES:

All other residential work:

Work subject to a free fall of forty (40) ft. or more: \$1.00 per hour additional.

Work performed over operative unquarded machinery or over heat-producing vessels which are operating and which have increased the temperature to at least 125 degrees: \$1.00 per hour additional.

Work performed with a helicopter: \$1.00 per hour additional. Height and hazard pay premiums shall not be compounded.

SHEE0080E 06/01/2002

Rates Fringes

MACOMB, OAKLAND AND WAYNE COUNTIES:

SHEET METAL WORKER:

Work on any single family home or multiple family housing unit, up to and including four stories, where each individual family apartment is individually conditioned by a separate and independent

unit or system	16.79	6.27
Siding and decking	21.33	8.77
All other residential work	28.34	17.00

TEAM0247E 06/01/2002

Rates	Fringes
24.11	a
24.26	a
24.36	a
	24.11 24.26

PAID HOLIDAYS:

New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksqiving Day and Christmas Day. If any of the above holidays fall on a Sunday, the following Monday shall be considered the holiday.

FOOTNOTE:

a. \$139.70 per week, plus \$30.80 per day, plus the following vacation pay:

Drivers who have been in the employ of their company for 3

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years or less: $0.60 per hour.
     Drivers who have been in the employ of their company for 4
  years through 10 years: $1.00 per hour.
     Drivers who have been in the employ of their company for
  11 years through 15 years: $1.45 per hour.
     Drivers who have been in the employ of their company for
  16 years and longer: $1.85 per hour.
        TRUCK DRIVER CLASSIFICATIONS
  GROUP 1: Truck driver on all trucks except semi trucks or
  tractor trailers, pole trailers, lowboys, straddle carriers,
  double bottom and special load permit vehicles
0 GROUP 2: Truck driver on semi trucks or tractor trailers
1 except pole trailer driver, lowboy driver, straddle
2 carriers, double bottom and special load permit vehicles
4 GROUP 3: Pole trailer driver, lowboy driver, straddle
5 carriers double bottom driver, special permit load driver &
6 fuel truck driver
9 WELDERS - Receive rate prescribed for craft performing operation
0 to which welding is incidental.
1 -----
3 Unlisted classifications needed for work not included within
4 the scope of the classifications listed may be added after
5 award only as provided in the labor standards contract clauses
6 (29 CFR 5.5(a)(1)(ii)).
8 In the listing above, the "SU" designation means that rates
9 listed under that identifier do not reflect collectively
O bargained wage and fringe benefit rates. Other designations
1 indicate unions whose rates have been determined to be
2 prevailing.
3
4
       WAGE DETERMINATION APPEALS PROCESS
6 1.) Has there been an initial decision in the matter? This can
7 be:
9 * an existing published wage determination
0 * a survey underlying a wage determination
1
2 * a Wage and Hour Division letter setting forth a
   position on a wage determination matter
4 * a conformance (additional classification and rate)
  ruling
```

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6
7 On survey related matters, initial contact, including requests
8 for summaries of surveys, should be with the Wage and Hour
9 Regional Office for the area in which the survey was conducted
O because those Regional Offices have responsibility for the
1 Davis-Bacon survey program. If the response from this initial
2 contact is not satisfactory, then the process described in 2.)
3 and 3.) should be followed.
5 With regard to any other matter not yet ripe for the formal
6 process described here, initial contact should be with the Branch
7 of Construction Wage Determinations. Write to:
9
       Branch of Construction Wage Determinations
0
       Wage and Hour Division
1
       U. S. Department of Labor
2
       200 Constitution Avenue, N. W.
3
       Washington, D. C. 20210
5 2.) If the answer to the question in 1.) is yes, then an
6 interested party (those affected by the action) can request
7 review and reconsideration from the Wage and Hour Administrator
8 (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:
9
0
            Wage and Hour Administrator
1
            U.S. Department of Labor
2
            200 Constitution Avenue, N. W.
3
            Washington, D. C. 20210
5 The request should be accompanied by a full statement of the
6 interested party's position and by any information (wage payment
7 data, project description, area practice material, etc.) that the
8 requestor considers relevant to the issue.
0 3.) If the decision of the Administrator is not favorable, an
1 interested party may appeal directly to the Administrative Review
2 Board (formerly the Wage Appeals Board). Write to:
3
            Administrative Review Board
4
5
            U. S. Department of Labor
6
            200 Constitution Avenue, N. W.
            Washington, D. C. 20210
9 4.) All decisions by the Administrative Review Board are final.
              END OF GENERAL DECISION
0
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SECTION 02482

DREDGING

PART 1 GENERAL

1.1 REFERENCE

The publication listed below, forms a part of this specification to the extent referenced. The publication is referred to in the text by basic designation only.

MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT)

MDOT 1996

(1996) Standard Specifications for Construction

UNITED STATES ENVIORNMENTAL PROTECTION AGENCY

EPA 600 A 79 020

Method for Chemical Analysis of Water and Wastes

1.2 UNIT PRICES

1.2.1 Measurement

1.2.1.1 Allowable Pay Overdepth and Sideslopes

The total estimated dredging quantity shown on the Bidding Schedule includes the required depth material plus the allowable overdepth material, allowable sideslope material. The allowable pay overdepth quantity listed below is computed for the allowable overdepth prism immediately below the material required to be dredged as shown on the drawings or otherwise specified. The allowable sideslope quantity listed below is computed immediately above the payment limit line for sideslopes as shown and specified.

a. Estimated Allowable Pay Overdepth and Sideslope Quantities in Cubic Yards.

Monroe Harbor

- (1) Overdepth 62,000 C.Y. (2) Sideslopes 13,000 C.Y.
- 1.2.1.2 Shoal Removal
 - If, before the contract is completed, shoaling occurs in any section previously accepted, including shoaling in the finished channel, because of the natural lowering of the side slopes or other natural causes, redredging at the contract unit price, within the limit of available funds, may be performed if agreed upon by both the Contractor and the Contracting Officer.

1.2.1.3 Soundings

The drawings (See CLAUSE entitled "CONTRACT DRAWINGS, MAPS AND

SPECIFICATIONS") represent the conditions existing at the time of survey, but all soundings shown thereon will be verified and corrected by soundings taken before dredging. Determination of quantities removed will be made from after dredging soundings and the calculations made therefrom to determine quantities by in-place measurement. The determination of the quantities to be paid for in the area specified, after having once been made, will not be reopened, except on evidence of collusion, fraud, or obvious error.

1.2.1.4 Volume Calculations

Within the limits of the allowable pay overdepth and side slope payment limit lines described in the Paragraph entitled "DREDGING", the total amount of materials removed and to be paid for under the contract will be measured by the cubic yard in place by computing the volume between the bottom surface shown by new soundings made before dredging and the bottom surface shown by the soundings of a survey made as soon as practicable after the work specified has been completed. Volume computations will be made by the Government by appropriate computer program or by the average end area method, based on cross sections including, but not limited to, cross sections taken at the same locations shown on the contract drawings. The average area of two (2) successive cross sections multiplied by the distance between the cross sections will be accepted as the volume. Any quantities misplaced or not satisfactorily placed in the approved disposal area will be deducted.

1.2.1.5 Excessive Dredging

Materials taken from beyond the limits specified in Subparagraphs "Allowable Pay Overdepth" and "Side Slopes", will be excluded from the computed total amount dredged as excessive channel dredging or excessive side slope dredging and for which payment will not be made. The final determination of the amounts of excessive dredging will be based wholly on the surveys made for final examination and acceptance. (See Paragraph entitled "FINAL EXAMINATION AND ACCEPTANCE.")

1.2.1.6 Monthly Partial Payments

Monthly partial payments will be based on quantities determined by daily soundings taken by the Contractor or other means acceptable to the Contracting Officer. (See CLAUSE entitled, "QUANTITY SURVEYS.") Sounding surveys for partial payment shall be conducted in the same manner specified in the Paragraph entitled, "PRIOR, AFTER AND CHECK SURVEYS," unless otherwise authorized or directed.

1.2.1.7 Payment for Mobilization and Demobilization (Single Projects)

Payment will be made pursuant to clause entitled "MOBILIZATION AND DEMOBILIZATION"

1.2.1.8 Continuity of Work

Monthly partial payments will be made for work performed prior to final examination and acceptance. However, as final dredging is being performed for final examination and acceptance, no payment will be made for such final dredging work performed in any area until the depth required under the contract is secured in the whole of such area, unless prevented by ledge rock, original material, or other obstructions, which cannot be removed by the plant specified in the accepted bid, or the equivalent of

such plant, without blasting or special apparatus. No payment will be made for final excavation in any area not adjacent to and in prolongation of areas where full depth has been secured, except by decision of the Contracting Officer. If a nonadjacent area is excavated to full depth during the day to day operations carried on under the contract, payment for all work therein may be deferred until the required depth has been secured in the area intervening.

1.3 PERFORMANCE REQUIREMENTS

1.3.1 Completion Time

No extension of time for completion will be allowed in connection with provision of a Contractor-Furnished transfer site.

1.3.2 Monitoring of Disposal Area

Unless otherwise directed by the Contracting Officer, there shall be no overflow or discharge into the lake as a result of operations under this contract. If the Contracting Officer directs the Contactor to release flow from the CDF into the lake, the Contractor shall continuously observe the effluent quality of the disposal area discharge during the period of use under this contract and shall report its observations on its daily QC reports. During all disposal operations the Contracting Officer will periodically conduct water quality monitoring of any allowed effluent from the confined disposal facility to verify that the quality of the effluent is within acceptable limits. The contractor shall monitor the elevation of water in the CDF and shall promptly notify the Contracting Officer any time there is imminent risk of overtopping weirs or dikes.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation. The following shall be submitted in accordance with SECTION 01300, entitled "SUBMITTAL DESCRIPTIONS":

Sounding Equipment Description and Calibration Data

Verification that the Contractor's sounding equipment has been calibrated to correspond with the Government's sounding equipment shall be submitted prior to commencing work. Also submit the description of the Contractor's sounding equipment and transducer frequency prior to commencing work.

SD-01 Preconstruction Submittals

Dredging, Conveyance and Disposal Plan; G-AOF

Prior to bringing equipment to the project site, submit plans of the proposed dredging, conveyance and disposal operations.

Dredging Disposal Safety Plan

Prior to commencing work at the disposal area, describe in detail the means and methods to be utilized to provide for the public safety at the disposal area, all in accordance with the Accident Prevention Plan.

Notice of Start of Dredging

Provide ten calendar day's advance written notice of the planned start of

actual dredging operations to allow the Government to schedule and perform the prior-to-dredging sounding survey work before arrival of the dredging equipment.

Instantaneous Load Data

Upon request of the Contracting Officer's Representative in the field, the Contractor shall immediately provide a copy of the hauling vessel's load data at the time of such request. Such instantaneous reporting is supplemental to all other required reporting.

SD-09 Manufacturer's Field Reports

Daily Report of Dredging Operations

Both sides of the report of operations form (ENG FORM 4267 or ENG FORM 27A), as appropriate to the type of work being performed, copies of which are available from the Detroit District Area Offices, shall be completed and furnished daily. Each report shall contain a signed certification in the "REMARKS" space attesting that no overflow or discharge occurred from the dredging vessel(s) while dredging and while in transit from the dredging area to the unloading area. In the event an overflow or discharge occurs while dredging or while in transit, such certification shall not be made and instead an oral notification and complete written report on the incident shall be made to the Contracting Officer in shortest possible time. When appropriate and approved, quality control compliance inspections may be reported under the "REMARKS" item on the form. Contractor shall submit an original and two (2) copies per calendar day to the Contracting Officer unless otherwise directed. An adequate supply of the report of dredging operation forms will be provided the Contractor by the Government upon request.

SD-09 Manufacturer's Field Reports

Sounding Records; G-AFO

A copy of the prior and after soundings of the transfer site shall be furnished.

1.5 PROJECT/SITE CONDITIONS

1.5.1 Character of Materials

1.5.1.1 General

The records of previous dredging and sampling are available for inspection at the Office of the Engineering & Technical Services Division, U.S. Army Corps of Engineers, Detroit District, 477 Michigan Avenue, McNamara Building, Detroit, Michigan.

1.5.1.2 Monroe Harbor

"The material to be removed within the required limits consists primarily of the shoaling that has occured since the last time the area was dredged. The shoaled materials consist primarily of silt, with some sand and clay. Stumps, logs, tires, cables, and miscellaneous debris is likely to be encountered. Virgin material may be encountered in the overdepth prism, and consists of clays and silts."

1.5.2 Disposal Area Conditions

The Government-furnished disposal area is fenced in and access is through a locked gate. The gate shall be left locked at all times that work to the disposal area is not in progress.

1.5.3 Transfer Site

If use of a Contractor-furnished disposal site entails use of a transfer site, or if a Government-furnished transfer site is to be used, the Contractor shall take soundings across the full width and length of the transfer site prior to the start-up of and immediately after the completion of transfer operations under this contract. Soundings shall be taken at lines and intervals acceptable to the Contracting Officer.

1.6 SEQUENCING AND SCHEDULING

1.6.1 Delivery of Plant and Order of Work

Unless otherwise directed by the Contracting Officer, the Contractor shall accomplish the required work within the time established in CLAUSE entitled, "COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK."

1.6.2 Sequence

Dredged material shall not be hauled across segments of the required dredging area which have been examined and found to be acceptable. There is no required sequence if the work is performed by hydraulic pipeline dredging equipment.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 DREDGING

3.1.1 General

The Contractor shall perform all dredging work to remove material to the required depths within the limits shown on the drawings and as specified. Any materials in the allowable overdepth prism and allowable side slopes are not required to be removed. Indicated required dredging areas within required downstream and upstream dredging limits will be revised by the Government, after obtaining the before (prior to) dredging soundings. The Contractor may be required to suspend dredging at anytime when for any reason the gauges or ranges cannot be seen or properly followed. Also no overflow is permitted from the hopper dredge and floating plant during dredging or are in transit between the point of pick-up and the point of deposition of dredge materials in the disposal area. Discharge into the harbor, river and lake from any pipes or pumping apparatus on the Contractor's dredge and floating plant is prohibited at all times.

3.1.2 Obstructions

Should original material, ledgerock, boulders, cobbles, rock fragments, wrecks, scrap materials, snags, stumps, piles, debris or other material be encountered which cannot be removed by the plant specified in the accepted bid, or equivalent plant, without blasting or special apparatus, the Contractor shall remove there from all overlying material within the

required dredging prism which in the judgment of the Contracting Officer can be removed by the use of the plant specified in the accepted bid or equivalent plant. The contractor shall be advised that there is a stone revetment that is maintained by the Ford Motor Company along the North shoreline and that this structure shall not be disturbed.

3.1.3 Overdepth and Tolerances

Two (2) drawings are enclosed in SECTION 01999 to aid in defining the requirements specified hereinafter.

3.1.3.1 Allowable Pay Overdepth

To cover inaccuracies of the dredging process, materials actually removed from within the channel lines to a depth of not more than one (1) foot below the required pay prism line will be measured and paid for at the contract unit price. However, the maximum quantity of overdepth materials to be paid for will be equivalent to that quantity present within the one (1) foot overdepth prism immediately below the required materials to be removed as determined from the prior to dredging soundings. Any dredging below the allowed one (1) foot will be considered as excessive dredging and for which payment will not be made.

3.1.3.2 Side Slopes

Materials actually removed, within limits shown on the drawings, to provide for final side slopes not flatter than one vertical (1V) on two horizontal (2H), perpendicular to the channel line or dredge limit line, whichever is applicable, but not in excess of the amount originally lying above the side slope payment limit line will be calculated and paid for. The provisions of this Subparagraph also apply to end slopes at the upstream and downstream dredging limits of the channel.

3.1.3.3 Toe of Side Slopes

Any materials remaining above the required pay prism line will be allowed to remain in place, but will not be paid for, provided these materials lie below the tolerance line specified hereinafter. The toe of side slope tolerance line, as shown on the following two (2) points and extended to side slope line:

- a. A point on the required pay prism line located a distance from the channel line or dredge limit line, as shown on the contract drawings (shown on the enclosed drawing in SECTION 01999 and the contract drawings as tolerance dimension "T.D." and;
- b. A point located at the channel line or dredge limit line, whichever is applicable, and above the required pay prism line a distance equal to the specified channel allowable pay overdepth.

3.1.3.4 Shoals

A tolerance of 0.5 feet above the required pay prism line, in the channel area, will be allowed for acceptance of remaining shoal materials. The allowed shoal materials may be left in place but shall be of such nature that they will not affect navigation, and will not be paid for unless they are removed. The allowed shoaling shall not be continuous throughout the required dredging area. The limitations for individual shoals are as follows:

a. Maximum width:

Maximum width of each remaining shoal area not required to be removed shall be not more than five percent (5%) of the full project channel width or ten (10) feet, whichever is greater.

b. Longitudinal length:

Longitudinal length of each remaining shoal area not required to be removed shall be not more than twenty-five percent (25%) of the full project channel width or fifty (50) feet, whichever is greater.

c. Cumulative width:

Cumulative width of remaining individual shoals not required to be removed within the shoal area, at any channel cross section, shall be not more than twenty-five percent (25%) of the full project channel width or ten (10) feet, whichever is greater.

3.2 CONVEYANCE AND TRANSFER OF DREDGED MATERIALS

3.2.1 General

All nautical vessels, pipelines and land based transport and conveyance systems shall be operated, loaded and unloaded in such manner as to prevent overflow, spills, leaks, waste, or other loss of dredged materials between point of pick-up and point of deposition within the disposal area. Hauling vessels shall have sufficient sidewall height and integrity to prevent drainage over or through the sides and bottom during hauling. The Contractor may base its bid on transfer facilities other than those furnished by the Government.

3.2.2 Restriction

The method employed by the Contractor in conveying dredged materials to the disposal area shall be as approved by the Contracting Officer at all times. Temporary dumping or placement of materials outside of the disposal area for subsequent rehandling into the disposal area is prohibited unless otherwise approved by the Contracting Officer.

3.2.3 Vehicular Conveyance

Dredged materials that are conveyed into the Government-furnished disposal area via vehicle is prohibited.

3.2.4 Disposal Facility

3.2.4.1 Operating Requirements

On-land operations on the Ford Motor Company property shown on the plans are prohibited at all times. The Contractor shall at its expense perform all repairs required to make the pipeline operation; and keep it in service. Pressure within the pipeline during its use shall not exceed eighty (80) pounds per square inch. During use of the line, it shall be flushed by the Contractor to insure the materials do not build up inside the pipe and cause the pipe to become plugged. Removal of a plug and all other materials due to a plugged line shall be performed by the Contractor

at no expense to the Government. The Contractor shall flush the line into the CDF with water from the lake until the water is running clear after the contract dredging is complete. The Contractor shall be responsible for preventing any leakage or spillage along the route of its pipeline as well as the Government's pipeline. In the event of a spill or leak it shall immediately be cleaned up by the Contractor.

3.2.4.2 Government-Furnished Pipelines

There is an existing Government-owned underground pipeline available for the Contractor's use for disposal of the dredged materials into the Government-furnished disposal area. The location of the pipeline is shown on the drawings. The existing underground pipeline consists of a plastic pipe which has an 18 inch inside diameter and 21.5 inch outside diameter. Locations of cleanouts in the line are shown on the drawings. The existing pipe at the headwall consist of a steel pipe section that is force fitted into a plastic pipe section. Outside diameter of the steel pipe is eighteen (18) inches and is made for dresser type connections. The Contractor's connection to the existing steel pipe shall be of a type that will provide allowance for any wave movement or other forces which would create movement of the Contractor's pipeline. The Contractor shall provide its own connections and any additional means necessary to transport dredged materials from the mooring area to the underground pipeline. The Contractor's pipeline within the area of Sterling State Park channel and Ford Motor Company Inlet channel shall be capable of being disconnected and moved to allow for free passage of watercraft. In addition, the Contractor shall provide it's own pipeline and connections from the point at which the underground pipeline surfaces on the outside of the confinement area dike to the required location of deposit of dredged materials within the confinement area/

3.2.4.3 Government Furnished Disposal Area

The discharge into the diked disposal area Cell No. 1, shall be controlled by the Contractor so as to provide a minimum one (1) foot freeboard or as required to insure dike integrity. The point of discharge of dredged materials into Cell No. 1 shall not be closer that 150 feet from the centerline of the perimeter dike and 200 feet from the cross dike between Cells No. 1 and 2. No material, other than that required or allowed to be dredged under this contract, may be disposed of in the diked disposal area. During all disposal operations, drainage toward the filter cells shall be maintained by the Contractor. Prior to any disposal operations the Contractor shall ensure the flow through the weir structure remains unimpeded. If approved by the Contracting Officer, remedial actions such as removal of debris and sediments shall be undertaken to provide free flow of effluent from the disposal area through Cell No. 2 and through the filter cells to Lake Erie.

3.2.5 Pipeline Conveyance

Dredged materials that are conveyed into the Government disposal area via hydraulic-pipeline are subject to the conditions specified herein.

3.2.5.1 Restricted Areas

Pipelines shall not be placed in area restricted by others. Where dredge pipelines pass in front of or along-side of restricted areas, the pipeline shall be submerged and securely anchored to the lake or river bottom with a minimum clear depth of ten (10) feet above the top of the pipeline.

3.2.5.2 Pipelines

Pipelines shall be of such depth and fabrication as to preclude any leaks or breaks. To determine the presence of any leaks or breaks, pipelines will be subject to pressure tests at twice the working pressure of the pipelines for a minimum of two (2) hours duration at the following times:

- a. Initial start of dredging.
- b. Startup following any disconnection of a pipeline for relocation purposes.
- c. Startup following any disconnection of a pipeline for removal of plugs and blockages.
- $\ensuremath{\mathtt{d}}.$ After a pipeline has been subjected to severe stress included by wind and waves.

3.2.5.3 Pump Pressure

The Contractor shall closely monitor pressure gages at hydraulic dredges and any pumps. Should a sudden drop in pressure occur indicating a leak or break in a pipeline, the Contractor shall immediately cease pumping operations and promptly correct the leak or break.

3.2.5.4 Pipe Cleaning

Prior to disconnecting any pipeline for relocation purposes, the Contractor shall flush the pipeline until clear water is observed at the point of discharge within.

3.2.5.5 Pipeline Blockage

Should any pipeline require disconnection for removal of plugs or blockages, materials removed from the pipeline shall be disposed of in the Government-furnished disposal area. The Contractor's method for disposal of materials removed from a plugged or blocked pipeline shall be subject to the approval of the Contracting Officer in accordance with Sub paragraph, "Protection of Water Resources," of Paragraph, "PROTECTION OF ENVIRONMENTAL RESOURCES," of SECTION 01130, "ENVIRONMENTAL PROTECTION," of DIVISION I, "GENERAL REQUIREMENTS."

3.2.5.6 Pumping Operations

The Contracting Officer may require the Contractor to cease pumping operations when actual wave height's at any pipeline are at or exceed four (4) feet or it is evident that rough seas might induce severe stresses on the pipeline.

3.2.5.7 Pipeline Inspection

The Contractor shall visually inspect pipeline(s) twice each eight (8) hour working period. If a twenty-four (24) hour work schedule is used, proper lighting shall be provided for inspection.

3.3 DISPOSAL OF DREDGED MATERIALS

3.3.1 General

The dredged materials shall be deposited within the Government-furnished disposal area shown on the contract drawings. The Government-furnished disposal area has sufficient capacity to contain all materials to be dredged under this contract. Placement of the dredged materials within the disposal area shall be as specified and shown except as otherwise directed by the Contracting Officer. Except as otherwise authorized by the Contracting Officer in writing, no disposal shall be performed unless a representative of the Contractor for Quality Control is present at the time. The method employed by the Contractor in depositing dredged materials in the disposal area shall be as approved by the Contracting Officer at all times.

3.3.2 Misplaced Materials

Any materials that is deposited elsewhere than in the places designated in this contract or approved by the Contracting Officer will not be paid for. the Contractor shall be required to remove such misplaces material at its expense and deposit it in the place designated in this contract or approved by the Contracting Officer.

3.4 CONTRACTOR QUALITY CONTROL

The Contractor shall establish and maintain a quality control system for dredging and disposal operations to assure compliance with the contract requirements and record its inspections of items under this system, including, but not limited to, the following:

- a. Layout of pipeline connecting and pipeline work, transfer and disposal areas.
- b. Proper dredging depths and disposal heights.
- c. Conveyance and disposal operations.
- d. Prevention of non-conforming discharge to waterway.
- e. Removal of misplaced material.
- f. Observations of CDF effluent quality.
- g. Safety requirements.

3.5 GOVERNMENT INSPECTION

3.5.1 Gauge Maintenance

The Contractor shall maintain its gauges, ranges, location marks and limit marks in proper order and position. The presence of a Government inspector shall not relieve the Contractor of its responsibility for the proper execution of the work in accordance with the specifications and drawings.

3.5.2 Facilities

The Contractor shall furnish, on the request of the Contracting Officer or any inspector, the use of such boats, boat operators, laborers and material forming a part of the ordinary and usual equipment and crew of the dredging plant as may be reasonably necessary in inspecting the work. However, the Contractor will not be required to furnish such facilities for the surveys

prescribed in the Paragraph "FINAL EXAMINATION AND ACCEPTANCE."

3.5.3 Transportation

The Contractor shall furnish, on the request of the Contracting Officer or any inspector, suitable transportation from designated points on shore to and from the various pieces of off-shore plant and off-shore disposal areas.

3.5.4 Compliance

Should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by the Contracting Officer, and the cost thereof will be deducted from any amounts due or to become due the Contractor.

3.6 PRIOR, AFTER AND CHECK SURVEYS

Prior, after and check surveys will be made by sonic sounding methods. The Contractor's sounding equipment shall be calibrated to correspond with the Government's sounding equipment. The Government will make prior and after surveys and may make check surveys. The Contractor shall make check surveys. Sounding Lines will be established by the Government for the required dredge area to provide the best fit of lines, within that area to use average end cross sections for quantity calculations. Cross-sections will have the required spacing as necessary to provide a good representation of the area surveyed. Unless otherwise determined by the Contracting Officer. The check surveys and after dredging soundings shall be taken as close as practicable on the same lines established and used for the prior to dredging soundings, unless otherwise determined by the Contracting Officer. The full electronic data set shall be used to determine cubic yards in place. Additional soundings will be taken as the Contracting Officer may deem necessary. Only one (1) prior survey will be made for the project, by the Government. If additional prior surveys are required, due to the Contractor's operations, the cost of such surveys shall be paid by the Contractor. The cost of such surveys shall be the same as specified in the Paragraph entitled, "FINAL EXAMINATION AND ACCEPTANCE.

3.7 FINAL EXAMINATION AND ACCEPTANCE

3.7.1 Examination

As soon as practicable after the completion of the entire work or any section thereof (if the work is divided into sections) as in the opinion of the Contracting Officer will not be subject to damage by further operations under the contract, such work will be thoroughly examined at the cost and expense of the Government by sounding or by sweeping, or both, as determined by the Contracting Officer. Should any shoals, lumps or other lack of contract depth be disclosed by this examination, the Contractor is required to remove same by dragging the bottom or by dredging at the contract rate for dredging, but if the bottom is soft and the shoal areas are small and form no material obstruction to navigation, the removal of such shoals may be waived at the discretion of the Contracting Officer. The Contractor or its authorized representative will be notified when soundings and/or sweepings are to be made, and will be permitted to accompany the survey party. When the area is found to be in a satisfactory condition, it will be accepted finally. Should more than two (2) sounding or sweeping operations by the Government over an area be necessary by reason of work for the removal of shoals disclosed at a prior sounding or sweeping, the

cost of such third and any subsequent sounding or sweeping operations will be charged against the Contractor at the rate of \$1,500 per calender day for Monroe Harbor in which the Government plant is engaged in sounding or sweeping and/or is enroute to or from the site or held at or near the said site for such operations.

3.7.2 Acceptance

Final acceptance of the whole or part of the work and the deductions or corrections of deductions made thereon will not be reopened after having once been made, except on evidence of collusion, fraud, or obvious error, and the acceptance of a completed section shall not change the time of payment of the retained percentages of the whole or any part of the work.

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